ATLAS WORKBENCH STANDARDS

A Guide for Uploading Final Project Documentation and Spatial Data to the ATLAS Workbench

Version Publish Date: 03/14/2025

This is a living document and updated regularly.

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ATLAS Policy

Streamlining Project Delivery through GIS-based Regional Modeling

Introduction

The North Carolina Department of Transportation (NCDOT or the Department) is committed to optimizing program performance through streamlining and expediting project development and delivery. The Department is dedicated to accomplishing this goal without sacrificing statutory requirements, public engagement, the environment, or project quality. This continuous effort includes evaluating recommendations for improving procedures, embracing technology improvements, and leveraging data sharing opportunities.

In support of this goal, NCDOT has developed ATLAS, which stands for Advancing Transportation through Linkages, Automation, and Screening. Through use of GIS-based data on a regional level, ATLAS will improve business processes and provide a data access and storage framework to support informed project development. This effort aligns with the Secretary of Transportation's priorities to improve program delivery.

Purpose

The purpose of this policy is to guide the integration of ATLAS into project development and program delivery. Adherence to this policy will allow NCDOT staff and consultants to better understand and define transportation problems; identify existing resources; recognize issues and constraints; develop potential solutions; and more effectively plan a project's approach and next steps.

Scope and Applicability

This policy applies to all Department staff and consultants supporting all transportation project delivery methods and technical units.

Effective Date

This policy is effective from **May 31, 2019**. The latest version of referenced publications (i.e., the ATLAS Data Standards Document and ATLAS Guidance) should be used in conjunction with this policy.

Policy

NCDOT's primary mission is to connect people, products, and places safely and efficiently with customer focus, accountability, and environmental sensitivity to enhance the economy and vitality of North Carolina. NCDOT is a performance-based organization with a strategic, data-driven, decision-making process that is transparent and accountable. NCDOT values innovation and promotes the development and use of new and better solutions.

ATLAS is an essential resource for NCDOT staff and consultants, and it was designed to improve business processes and provide a framework for data. It is an aid to, and not a substitute for, critical thinking and decision making throughout a project's lifecycle. ATLAS is not a replacement for subject matter expertise or field verification.

It is the Department's policy that ATLAS will streamline and expedite project development and delivery. This will be accomplished through use of the ATLAS Screening Tool, Search Tool, and Workbench. Early screening of projects will aid in the identification of issues that may affect scope, schedule, and budget. Access to, and Automation of, reports will reduce repetitive manual tasks. A central repository for project deliverables and

associated data in a geospatial format will improve efficiency and communication. As data is captured for individual projects, the cache of data available for future projects will grow.

Responsibilities

Successful integration of ATLAS requires NCDOT staff and consultants to be fully vested in embracing process improvements and technology advancements. Accordingly, NCDOT staff and consultants are expected to abide by the following requirements:

- NCDOT staff and consultants will submit all signed documents, project deliverables, reports, and official plan submittals through the ATLAS Workbench. Files will be Automatically placed in the correct SharePoint folder. Spatial data will be displayed in the Workbench Map.
- NCDOT staff and consultants will use the ATLAS Workbench to manage their projects. The Workbench steps teams through all facets of the project lifecycle and tracks the progression of a project based on reporting from multiple business units.
- NCDOT staff and consultants will use the ATLAS Screening Tool to assess study areas for potential effects to the human and natural environment. The Screening Tool will help project teams quickly understand a project's scope and schedule. It will provide information essential to a Scoping meeting and for completion of the CE checklist.
- NCDOT staff and consultants will use the ATLAS Search Tool to help create project deliverables by searching for relevant data and downloading the files within the study area, such as an environmental base map for a project's Natural Resources Technical Report or Indirect and Cumulative Effects document.
- NCDOT staff and consultants will follow the basic data standards (i.e., file naming conventions, spatial data standards, and document and data submission protocols) identified in the ATLAS Data Standards Document. These basic data standards will ensure that spatial data and reports received by NCDOT can be incorporated into tools developed by NCDOT.
- NCDOT staff and consultants will include acknowledgement of, and planned adherence to, the ATLAS Policy and basic data standards in contract documents.
- NCDOT staff and consultants will ensure appropriate involvement from technical units and Subject Matter Experts.
- NCDOT staff and consultants will communicate issues and opportunities for improvement to the ATLAS team. The success of ATLAS is reliant on active input from NCDOT staff and consultants.

Contact:

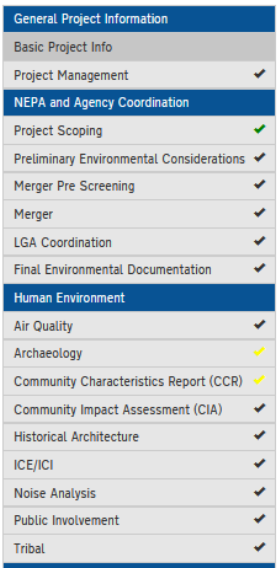
For questions or comments, contact ATLAS at Atlas@ncdot.gov.

Purpose of ATLAS Workbench and ATLAS Standards

All NCDOT project staff and consultants are required to finalize their project activities through the ATLAS Workbench, including the upload of final project files and spatial data, for all STIP projects and Project Delivery Network (PDN) projects with Connect Scoping or Preconstruction project sites. This document, the ATLAS Standards, outlines:

1. What specific project files and data are required to be uploaded to the ATLAS Workbench.
2. The quality control standards for those required project files and spatial data uploads.
3. These quality control standards allow for automatic sharing of project documents and spatial data to multiple locations for access and use by various project stakeholders and provide regional awareness about NCDOT projects. These standards will ensure that spatial data created during project delivery is captured in a way that empowers other tools developed by NCDOT. This process helps ensure that project files are handled consistently across the program to enable data analytics and sharing of project information that is key to improving and integrating project delivery at NCDOT. The old process of saving final documents directly to SharePoint project sites did not support the cross-project reporting required to streamline the PDN in the future. Users do not populate the file metadata needed to accurately query the status of project delivery activities across projects.
4. The ATLAS Workbench is closely integrated with SharePoint project file repositories on Connect Scoping and Connect Preconstruction. Files uploaded to ATLAS are saved Automatically to Connect Scoping and Preconstruction with file metadata configured by the ATLAS Administrator, staffed by the NCDOT Environmental Analysis Unit, at the direction of NCDOT business units.

The ATLAS Workbench has NCDOT and consultant users to upload key deliverables for Project Delivery Network (PDN) activities that span from PDN Stage 1 to 4, including Express Design to Project Scoping to Environmental Analysis to Permitting. The ATLAS team continues to collaborate with the Integrated Project Delivery (IPD) Team to determine other business processes that would benefit from utilizing the ATLAS Workbench to document their project work, outcomes, and deliverables. In addition to standardizing the upload of project deliverables, the ATLAS Workbench asks users to answer key questions to better capture project status, risks, and needed coordination for NCDOT technical unit managed PDN activities.



The final deliverables required to be uploaded to the ATLAS Workbench are organized into key sub-matter groups or NCDOT business categories, and can be broadly categorized into two groups:

1. Documentation (including PDF, XLSX, zip files).
2. Spatial Data (SHP formats that are field collected and/or created using GIS software; DGN data created using CAD software).

Along the left side of the ATLAS Workbench interface, deliverable uploads and key questions are organized by DOT business categories.

DOT project staff and consultants should consult the Final Uploads section to determine if a specific project deliverable is required to be uploaded to the ATLAS

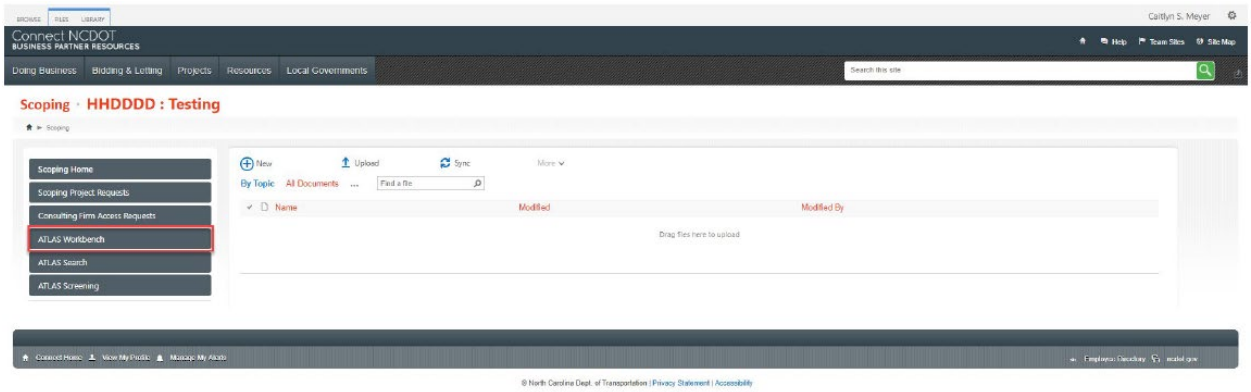
Workbench per NCDOT policy. Deliverables that require upload to the ATLAS Workbench are denoted in the PDN Document with an "A" next to the item.

How to Access the ATLAS Workbench

Users utilize their NCID to login into the ATLAS applications. Your NCID must be registered with the ATLAS team in ArcGIS Portal. To gain access to the ATLAS Workbench, NCDOT staff, consultants and partners must contact the ATLAS Help Desk at ATLAS@ncdot.gov and may be required to complete training before being granted access to the application. This set up will enable ATLAS access for the ATLAS Search, Screening, and Workbench applications.

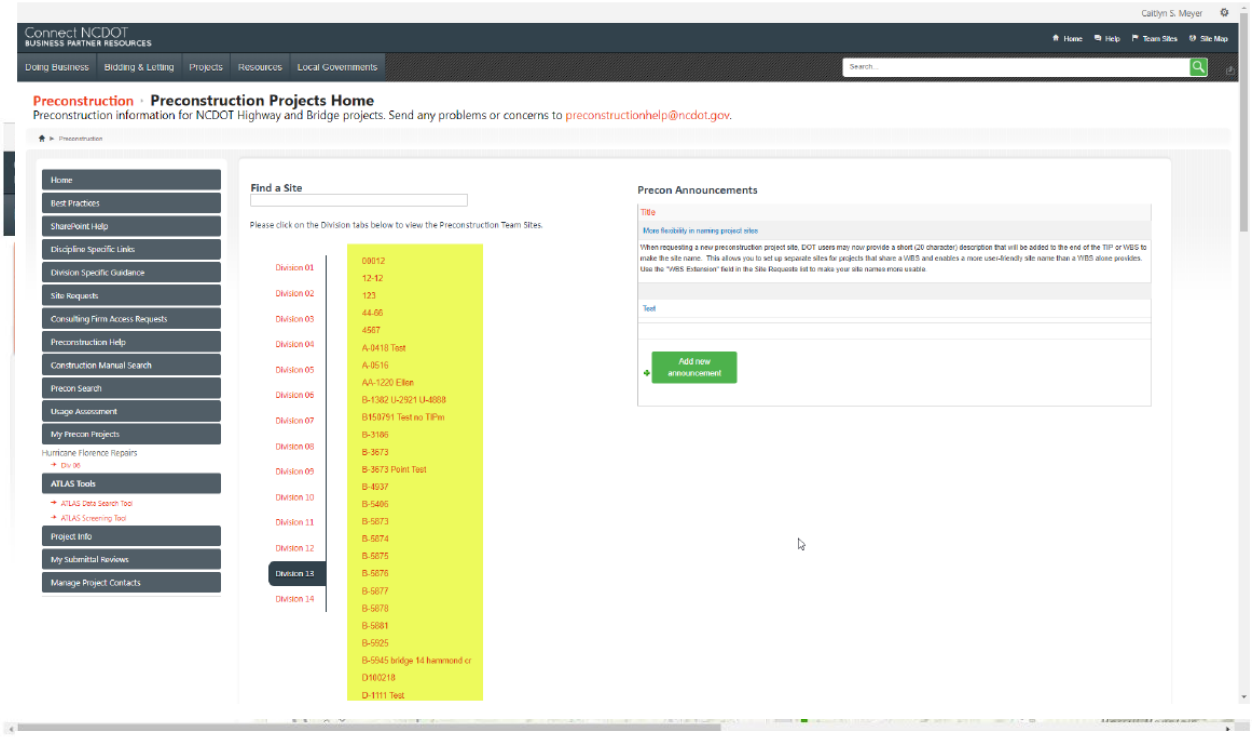
To be added as an ATLAS user, your NCID also needs to be set up for Connect Preconstruction Disciplines folders access for NCDOT staff and consultants. Consulting firm access is granted on a project-by-project basis for Connect Preconstruction. Contact your NCDOT project manager or preconstruction@ncdot.gov to access.

If you are completing an Express Design, access your project's ATLAS Workbench by navigating to the project page on Connect Scoping.



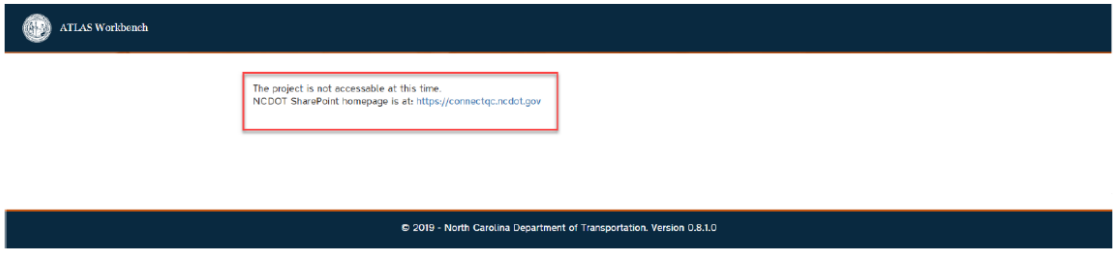
ATLAS Tools accessible from Connect Scoping project site.

If you are completing project work for a project in Project Scoping phase or later in the PDN, access your project's ATLAS Workbench by navigating to the project page in Connect Preconstruction.



Connect Preconstruction home

Note: If you are not authorized to access the Workbench for the project, you will receive the following message. Contact your Project Manager to make sure that access is requested through the Connect team.



ATLAS Tools accessible from Connect Preconstruction project site. If you do not have contributor access to Preconstruction disciplines.

At this time, you can only get to the ATLAS Workbench for projects that have a Connect project site created. Need a project site created? Contact preconstructionhelp@ncdot.gov.

The ATLAS team plans to collaborate with IPD team in the future to determine how to capture key environmental documentation about those projects that do not currently utilize Connect Scoping or Preconstruction so it can be reported upon and shared with interested parties. Questions may be submitted to ATLAS@ncdot.gov.

Standards Document Versioning

The ATLAS Data and Document Standards is a living document that is updated regularly. Any versions of this document found offline are not to be considered current.

Please visit the following SharePoint location for the latest version.

Please contact ATLAS@ncdot.gov for any questions.

Version	Date	Action	Performed By
2.1	04.21.2021	Redesign to align with IPD style guide and improve organization	ATLAS Team
2.2	7.18.2022	Reorganize to improve readability	ATLAS Team
2.3	10.13.2023	Reorganize to match Workbench categories.	ATLAS Team
2.4	11.5.2024	Reorganize to match Workbench categories.	ATLAS Team
2.5	3.14.2025	Redesign ATLAS fields section and reorganized to match Workbench categories and schemas.	ATLAS Team

ATLAS Deliverables

What is an ATLAS Deliverable?

An ATLAS Deliverable includes final documents, data, and/or files that are required to be uploaded into the NCDOT's ATLAS Workbench web application. Not all ATLAS Deliverables are required on all projects. The DOT PM (Central, Division, or Technical Unit PM) will determine required work based on project scope and screenings. Files uploaded to ATLAS must follow the ATLAS Standards.

When you upload a file, ATLAS *Automatically* saves it to the project's Connect Scoping or Connect Preconstruction project site. Uploading these files to ATLAS ensures that files are saved with the correct naming convention and correct metadata, and key document tags are assigned in the project record.

Full guidance on how to upload a file to the ATLAS Workbench application, including file naming conventions and schema standards, can be found in later sections of this document.

A list of project files that must be uploaded to the ATLAS Workbench when completed is included in the Final Uploads section.

Acceptable File Formats

The ATLAS Workbench is configured to accept the following file formats:

- PDF, Document Sets, SHP zip, DGN zip, generic zip, COR, and XLSX

Each deliverable has its file type identified in the detailed Uploads and Standards sections below.

Overall Project Documentation File Standards

Only the final version of PDN deliverable documentation should be uploaded to the ATLAS Workbench. This is the version of the document that will be shared with project stakeholders and carried forward at later project phases if required.

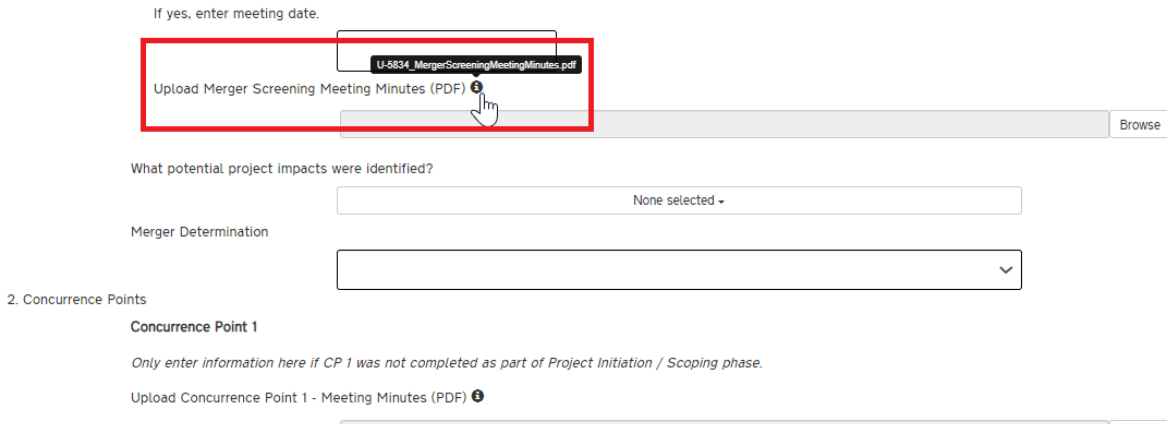
All ATLAS deliverables are assigned file naming conventions that follow this general format:
ProjectID_ReportName.FileTypeSuffix

Examples of naming conventions:

- A CCR Report for Project Number U-5711 is named:
  - U-5711_CCR.pdf
- A Traffic Forecast Report for Project Number 17BP.1.R.84 is named:
  - 17BP.1.R.84_TrafficForecast.pdf
- A LUSA report for Project 17BP.1.R.91 Chowan 3 (B-5501) is named:
  - 17BP.1.R.91_LUSA.pdf

The ProjectID is usually the Project Number (e.g., U-5711, 17BP.1.R.84, B-5606, 44833). Note that the "xxxxx" represents the ProjectID in the file naming conventions outlined in the next section of this document. This is tied to the Project Name set up for the Connect Scoping and Preconstruction site requests. Report Name is a short name for the PDN deliverable. There are tool tips in the ATLAS Workbench application interface that will guide you to the correct naming convention for your upload.

Over time new deliverables may be introduced in any of the subject areas. These new deliverables shall be named in the manner described above. Contact *Atlas@ncdot.gov* for adding new uploads to the list of Standards and Workbench tool.



Tooltips throughout the ATLAS interface

Overall Geospatial File Standards

Geospatial data (SHP or DGN files) uploaded through ATLAS must meet the standards being outlined below. This is spatial data associated with PDN processes. Harvesting this spatial data can help inform future project work in the region. These standards are in line with NCDOT's Geospatial Standards and Practices found at: https://connect.ncdot.gov/resources/gis/Pages/GIS-Standards.aspx.

Each geospatial deliverable must follow a defined schema, include standard ATLAS fields, as well as the overall geospatial standards outlined below. A set of GIS shapefile templates are available for download here to assist you in following the schema standards.

1. **Spatial Reference**

   All GIS Data shall be in the North American Datum 1983 (NAD83) Horizontal geodetic datum and referenced in the NC State Plane Coordinate System (NCSPC) and in the North American Vertical Datum of 1988 (NAVD88). Measurement units are in US Survey feet. NCDOT's LRS is referenced to this common spatial reference.

   Details:

Projected Coordinate System:	NAD_1983_StatePlane_North_Carolina_FIPS_3200_Feet
Projection:	Lambert_Conformal_Conic
False_Easting:	2000000.00261667
False_Northing:	0.00000000
Central_Meridian:	-79.00000000
Standard_Parallel_1:	34.33333333
Standard_Parallel_2:	36.16666667
Latitude_Of_Origin:	33.75000000
Linear Unit:	Foot_US
Geographic Coordinate System:	GCS_North_American_1983
Datum:	D_North_American_1983
Prime Meridian:	Greenwich
Angular Unit:	Degree

2. **Accuracy Requirements**

   All GIS data shall have a known spatial accuracy. Positional accuracy is a statement of how closely the location of a feature represents a true position on the ground. Attribute accuracy is the closeness of attribute values to their true values. A description of positional and attribute accuracy **shall be included with the GIS data.**

3. **Supported Data Formats**

   As a rule, all spatial data should be delivered as Esri shapefiles. Exceptions are noted in the individual subject area sections. Shapefiles shall be submitted as individual zipped shapefiles. All Shapefiles shall

include at a minimum a .shp, .shx, .dbf, and .prj . CAD files shall be submitted in .dgn format where required.

4. **Metadata**

   Template shapefiles downloaded from the SharePoint link (above) contain metadata. This metadata is compliant with the NCDOT Metadata Content Standard for Geospatial Data. https://xfer.services.ncdot.gov/gisdot/GISStandardsAndPractices/NCDOT%20GIS%20Metadata%20Content%20Standard.pdf

   Metadata is not required to be updated by the end user.

5. **General Naming Convention**

   All ATLAS deliverables are assigned file naming conventions that follow this general format: **ProjectID_ShapefileName.pdf.** No spaces are allowed in the name.

   Examples:

   - A CCR DCIA shapefile for Project Number U-5711 is named:
     - U-5711_ccrDCIA.zip & U-5711_ccrDCIA.shp
   - A Traffic Forecast Project Limit Shapefile for Project Number 17BP.1.R.84 is named
     - 17BP.1.R.84_ProjectLimit.zip & 17BP.1.R.84_ProjectLimit.shp
   - A Traffic Noise Monitoring Sites shapefile for Project 17BP.1.R.91 Chowan 3 (B-5501) is named:
     - 17BP.1.R.91_MonitoringSites.zip & 17BP.1.R.91_MonitoringSites.shp

   The ProjectID is usually the Project Number (e.g., U-5711, 17BP.1.R.84, B-5606, 44833). This is tied to the Project Name set up for the Connect Scoping and Preconstruction site requests. Shapefile Name is a short name for the spatial data deliverable. There are tool tips in the ATLAS Workbench application interface that will guide you to the correct naming convention for your upload.

6. **Zipped Folder Uploads**

   Each GIS Shapefile or DGN must be zipped up before upload to the Workbench.

   Over time new geospatial data may be introduced in any of the subject areas. These data files shall be named in the manner described above. Contact ATLAS@ncdot.gov for adding new uploads to the list of Standards and Workbench tool.

ATLAS Fields

Shapefiles (including shapefiles being created under the subject areas) should contain the following four fields: ProjNumber (Project Number from SharePoint), DateCreate (Date the Shapefile was Created), RptName (Report Name associated with the shapefile), and Notes (User Notes). These fields will help ensure spatial data received by NCDOT can be incorporated into tools being developed by ATLAS. Every shapefile uploaded to ATLAS tools shall at a minimum contain the ATLAS fields described below. However, the user will need to review the requirements for their individual discipline to confirm what other fields may be required when uploading to that specific tab. Navigate to an individual spatial data specification section to review what fields may be required for your GIS upload.

Table Attributes

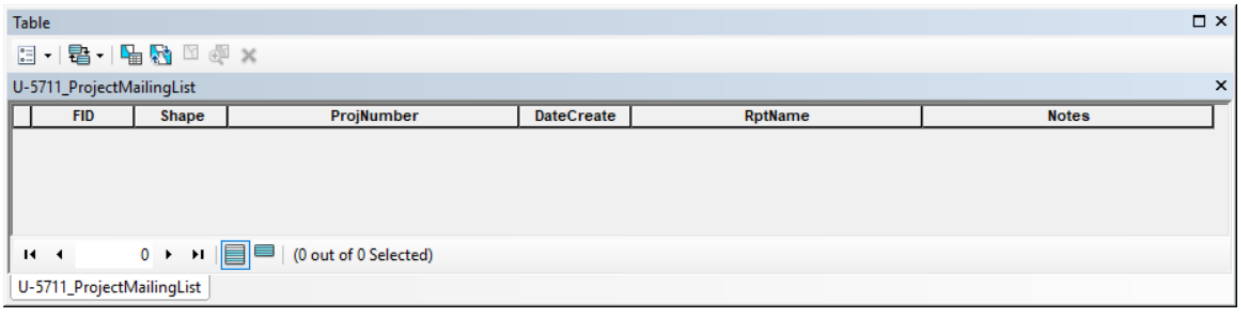
The GIS tables throughout this document will be organized using the following attributes:

Field Name – This is the name of the shapefile field. Shapefile field names must be limited to 10 characters. No underscores are allowed, and field names must be in CamelCase. Do ensure that the names of fields are spelled exactly as in the table above. Please see the Final Uploads and Spatial Data Specifications section for specific fields that are added to shapefiles by Subject Area.

Required/Not Required – This field specifies if the field is Required or Not Required to be filled in by the creator of the shapefile. The Required/Not Required fields should be verified by the creator of the shapefile by checking the specific requirements under that particular section below. The required fields are: *ProjNumber, RptName*, and *DateCreate*. The Notes and other fields refer to any other (miscellaneous) data that is optional to be included with the shapefile. These are not required fields to populate.

Type & Length – These are the field specifications for the field.

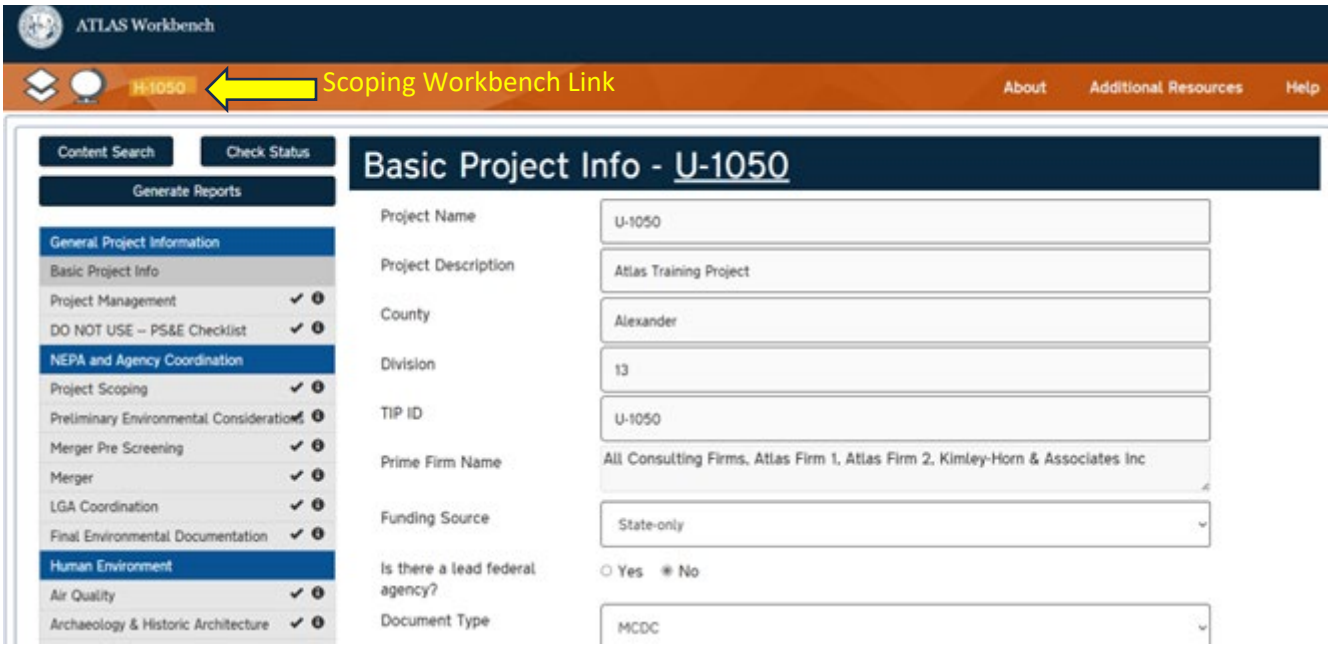
Description – This is a brief description of the field.

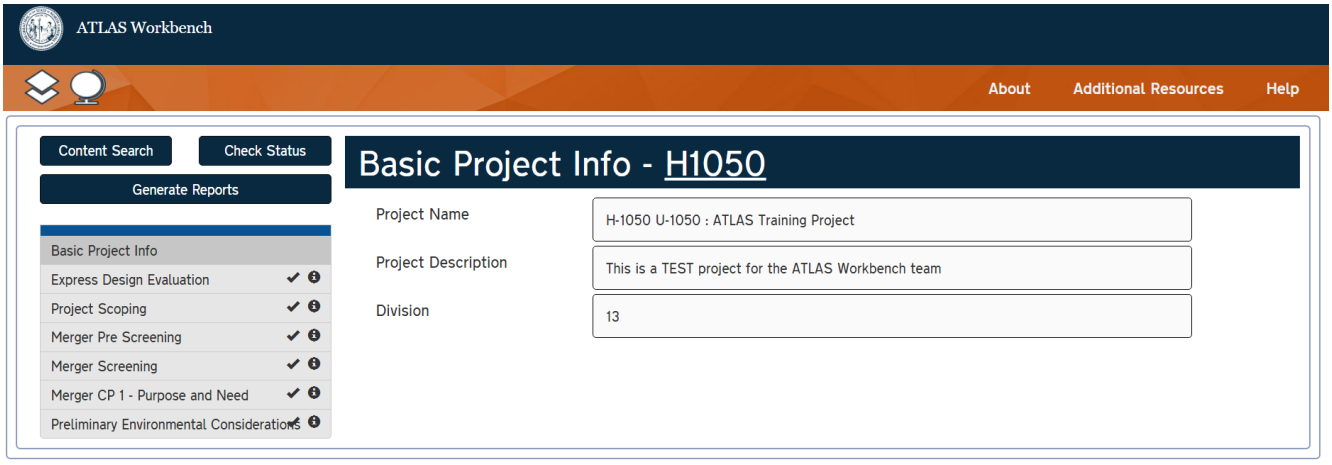


Simple blank GIS shapefile template

How to Access the Scoping Workbench

The scoping workbench is used to upload project deliverables during the planning phase of a project. If a project has a corresponding Scoping Workbench it can be accessed by clicking on the link, which is the project's SPOT ID, embedded within the project's workbench tab (highlighted in the picture below) for projects that have scoping sites.


ATLAS Workbench
H-1050
Scoping Workbench Link
About
Additional Resources
Help
Content Search
Check Status
Generate Reports
General Project Information
Basic Project Info
Project Management
DO NOT USE – PS&E Checklist
NEPA and Agency Coordination
Project Scoping
Preliminary Environmental Considerations
Merger Pre Screening
Merger
LGA Coordination
Final Environmental Documentation
Human Environment
Air Quality
Archaeology & Historic Architecture
Basic Project Info - U-1050
Project Name
U-1050
Project Description
Atlas Training Project
County
Alexander
Division
13
TIP ID
U-1050
Prime Firm Name
All Consulting Firms, Atlas Firm 1, Atlas Firm 2, Kimley-Horn & Associates Inc
Funding Source
State-only
Is there a lead federal agency?
Yes
No
Document Type
MCDC


ATLAS Workbench
About
Additional Resources
Help
Content Search
Check Status
Generate Reports
Basic Project Info
Express Design Evaluation
Project Scoping
Merger Pre Screening
Merger Screening
Merger CP 1 - Purpose and Need
Preliminary Environmental Considerations
Basic Project Info - H1050
Project Name
H-1050 U-1050 : ATLAS Training Project
Project Description
This is a TEST project for the ATLAS Workbench team
Division
13

Final Uploads and Spatial Data Specifications

Scoping Workbench & NEPA and Agency Coordination

Express Design Evaluation

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Scoping project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Express Design Assignment Checklist (PDF)	x-xxxx_AssignmentChecklist.PDF
2.	Express Design ATLAS Screening Report (PDF)	x-xxxx_ATLASScreeningReport_EXD.PDF
3.	Environmental Features Map(s) (PDF)	x-xxxx_EFM.PDF
4.	Traffic Memo (PDF)	x-xxxx_TrafficMemo.PDF
5.	Constructability Narrative (PDF)	x-xxxx_ConstructabilityNarrative.PDF
6.	Design Assumptions (PDF)	x-xxxx_DesignAssumptions.PDF
7.	Final Conceptual Design 1 (Document Set)	x-xxxx_FinalConceptualDesign-Alternative1 (Document Set)
8.	Final Conceptual Design 2 (Document Set)	x-xxxx_FinalConceptualDesign-Alternative2 (Document Set)
9.	Final Conceptual Design 3 (Document Set)	x-xxxx_FinalConceptualDesign-Alternative3 (Document Set)
10.	Final Conceptual Design 4 (Document Set)	x-xxxx_FinalConceptualDesign-Alternative4 (Document Set)
11.	Microstation Files (ZIP)	x-xxxx_Microstation.Generic Zip
12.	Right of Way Estimate (Document Set)	x-xxxx_RightofWayEstimate (Document Set)
13.	Construction Cost Estimate (Document Set)	x-xxxx_ConstructionCostEstimate (Document Set)
14.	Utility Cost Estimate (Document Set)	x-xxxx_UtilitiesEstimate (Document Set)

	Upload	File Name for upload
15.	ITS Cost Estimate (Document Set)	x-xxxx_ITSCostEstimate (Document Set)
16.	Preliminary Mapping Limits (DGN)	x-xxxx_PrelimMappingLimits.DGN
17.	Contract Type Decision Tool (PDF)	x-xxxx_ContractType.PDF
18.	Project Initiation Form (PDF)	x-xxxx_ProjectInitiationForm.PDF

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Scoping project pages.

	Spatial Data Content	File Name for upload
1.	Scoping Study Area (zip)	x-xxxx_ScopingStudyArea.zip
2.	Mapping Limits (GIS SHP)	x-xxxx_PrelimMappingLimits.zip

Spatial Data Specifications

SCOPING STUDY AREA (POLYGON)

Special Instruction: To be converted to a closed polygon.

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data

Field Name	Required/Not Required	Type	Length	Description
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature

Spatial Data Specifications

PRELIMINARY MAPPING LIMITS (POLYGON)

Special Instruction: To be converted to a closed polygon.

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature

Project Scoping

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Scoping project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Project Initiation Form (PDF)	x-xxxx_ProjectInitiationForm.PDF
2.	Project Scoping Screening Checklist (PDF)	x-xxxx_ProjectScopingChecklist.PDF
3.	Project Scoping ATLAS Screening Report (PDF)	x-xxxx_ATLASScreeningReport_PS.PDF
4.	Project Scoping Report (PDF)	x-xxxx_ProjectScopingReport.PDF
5.	Complete Streets Project Sheet (PDF)	x-xxxx_CompleteStreetsProjectSheet.PDF
6.	Completed Traffic Safety Screening (XLSX)	x-xxxx_TrafficSafetyScreening.XLSX

GIS File Uploads

No GIS data uploads have been identified as part of Project Scoping.

Merger Pre-Screening

Project Documentation Uploads

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Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Upload Merger Pre-Screening Form (PDF)	x-xxxx_MergerPreScreeningForm.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Project Scoping.

Merger Screening

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Scoping project pages.

Notes about File Naming Standards:

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Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Upload Merger Screening Meeting Minutes (PDF)	x-xxxx_MergerScreeningMinutes.PDF
2.	Upload Merger Plan Packet (PDF)	x-xxxx_MergerPlanPacket.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Project Scoping.

Merger CP 1 – Purpose and Need

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Scoping project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Upload CP1 Merger Meeting Packet	x-xxxx_CP1_MergerMeetingPacket.PDF
2.	Upload CP1 Meeting Minutes and Summary (PDF)	x-xxxx_CP1Summary.PDF

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	File Name for upload
1.	Upload Merger Study Area Polygon (GIS)	x-xxxx_MergerStudyArea.zip

Spatial Data Specifications

MERGER STUDY AREA (POLYGON)

Special Instruction: To be converted to a closed polygon.

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature

Preliminary Environmental Considerations

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Scoping project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	ATLAS Upload	x-xxxx_ATLAS Upload.pdf

GIS File Uploads

No GIS data uploads have been identified as part of Preliminary Environmental Considerations.

Preconstruction Workbench

Project Management

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Tribal document (letters, responses, Programmatic Agreements (PA), etc.)	x-xxxx_Tribal_docs (Document Set)
2.	If shelving documentation was completed, upload it here.	x-xxxx_ProjectShelvingDoc.PDF
3.	1EN1. If yes, upload the PA Screening Checklist (PDF).	x-xxxx_PAScreeningChecklist.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Project Management.

Project Scoping

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Scoping or Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1FS3. Project Initiation Form (PDF)	x-xxxx_ProjectInitiationSheetPSR.PDF
2.	1FS3. Project Scoping Screening Checklist (PDF)	x-xxxx_ProjectScopingChecklist.PDF
3.	1IM1. Complete Streets Project Sheet (PDF)	x-xxxx_CompleteStreetsProjectSheet.PDF
4.	1IM1. Complete Streets Review Assessment (CSRA) (PDF)	x-xxxx_CompleteStreetsReviewAssessment.PDF
5.	1FS3. Project Scoping ATLAS Screening Report (PDF)	x-xxxx_ATLASScreeningReport_PS.PDF
6.	1FS3. Project Scoping Report (PDF)	x-xxxx_ProjectScopingReport.PDF
7.	1TS1. Completed Traffic Safety Screening (XLSX)	x-xxxx_TrafficSafetyScreening.XLSX
8.	Upload the Notice to Proceed (NTP) (PDF)	x-xxxx_NTP.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Project Scoping.

Preliminary Environmental Considerations

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Scoping or Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Preliminary Environmental Considerations checklist	x-xxxx_PreliminaryEnvironmentalConsiderations.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Preliminary Environmental Considerations.

Merger Pre-Screening

The following section has no GIS upload controls, however, there are qualitative questions that need to be addressed.

Project Documentation Uploads

No Project Documentation uploads have been identified as part of Merger Pre-Screening workflow.

GIS File Uploads

No GIS data uploads have been identified as part of Merger Pre-Screening.

Merger

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1EP1. Upload Merger Screening Meeting Summary	x-xxxx_MergerScreening_Summary.PDF
2.	1EP1. Upload the latest Merger Plan	x-xxxx_MergerPlan.PDF
3.	1EP1. Upload Concurrence Point 1 Packet	x-xxxx_CP1MergerMeetingPacket.pdf .PDF
4.	1EP1. Upload Concurrence Point 1 - Meeting Summary	x-xxxx_CP1_MergerMeetingSummary.PDF
5.	1EP1. Upload signed Concurrence Point 1 concurrence form	x-xxxx_CP1_ConcurrenceForm.PDF
6.	2EP1. Upload Concurrence Point 2 Packet	x-xxxx_CP2_MergerMeetingPacket.PDF
7.	2EP1. Upload Concurrence Point 2 - Meeting Summary	x-xxxx_CP2_MergerMeetingSummary.PDF
8.	2EP1. Upload signed Concurrence Point 2 concurrence form	x-xxxx_CP2_ConcurrenceForm.PDF

	Upload	File Name for upload
9.	2EP1. Upload Concurrence Point 2A Packet	x-xxxx_CP2A_MergerMeetingPacket.PDF
10.	2EP1. Upload Concurrence Point 2A - Meeting Summary	x-xxxx_CP2A_MergerMeetingSummary.PDF
11.	2EP1. Upload signed Concurrence Point 2A concurrence form	x-xxxx_CP2A_ConcurrenceForm.PDF
12.	2EP1. Upload Concurrence Point 3 Packet	x-xxxx_CP3_MergerMeetingPacket.PDF
13.	2EP1. Upload Concurrence Point 3 - Meeting Summary	x-xxxx_CP3_MergerMeetingSummary.PDF
14.	2EP1. Upload signed Concurrence Point 3 concurrence form	x-xxxx_CP3_ConcurrenceForm.PDF
15.	2EP1. Upload Concurrence Point 4A Packet	x-xxxx_CP4A_MergerMeetingPacket.PDF
16.	2EP1. Upload Concurrence Point 4A - Meeting Summary	x-xxxx_CP4A_MergerMeetingSummary.PDF
17.	2EP1. Upload signed Concurrence Point 4A concurrence form	x-xxxx_CP4A_ConcurrenceForm.PDF
18.	2EP1. Upload Concurrence Point 4B Material	x-xxxx_CP4B_MergerMeetingMaterial (Document Set)
19.	2HY2. Upload Concurrence Point 4B - Meeting Minutes	x-xxxx_CP4B_MergerMeetingSummary.PDF
20.	2EP1. Upload Concurrence Point 4C Material	x-xxxx_CP4C_MergerMeetingMaterial (Document Set)
21.	3HY1. Upload Concurrence Point 4C - Meeting Minutes	x-xxxx_CP4C_MergerMeetingSummary.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Merger.

LGA Coordination

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Initial LGA Coordination Table (XLSX)	x-xxxx_InitialLGATable.XLSX
2.	Interim LGA Coordination Table (XLSX)	x-xxxx_InterimLGATable.XLSX
3.	Final LGA Coordination Table (XLSX)	x-xxxx_FinalLGATable.XLSX
4.	LGA Commitment Document(s) (PDF).	x-xxxx_LGACommitment.PDF

GIS File Uploads

No GIS data uploads have been identified as part of LGA Coordination.

Final Environmental Documentation

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Categorical Exclusion (CE) Checklist (PDF)	x-xxxx_CEChecklist.PDF
2.	2EP1. Categorical Exclusion Document (CE) (PDF)	x-xxxx_CE.PDF
3.	2EP1. Minimum Criteria Determination Checklist (MCDC) (PDF)	x-xxxx_MCDC.PDF
4.	2EP1. Environmental Assessment (EA) (PDF)	x-xxxx_EA.PDF
5.	2EP1. Finding of No Significant Impact (FONSI) or Combined EA/FONSI (PDF)	x-xxxx_FONSI.PDF
6.	2EP1. Environmental Impact Statement (EIS) (PDF)	x-xxxx_EIS.PDF

	Upload	File Name for upload
7.	2EP1. Record of Decision (ROD) (PDF)	x-xxxx_ROD.PDF
8.	3EP1. ROW Consultation (PDF)	x-xxxx_ROWConsultation.PDF
9.	4EP1. Construction Consultation (PDF)	x-xxxx_ConstructionConsultation.PDF
10.	3EP1/4EP1. Re Evaluation (PDF)	x-xxxx_Reevaluation.PDF
11.	Other Consultation (PDF)	x-xxxx_OtherConsultation.PDF
12.	Section 4(f) documents: de minimis concurrence, public notice, correspondence, and all supporting documents. (Document Set)	x-xxxx_4fAgreementDocuments (Document Set)

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	File Name for upload
1.	Project Study Area (GIS)	x-xxxx_ProjectStudyArea.zip

Spatial Data Specifications

The following fields are required parts of the shapefile and must be (based on Required/Not Required field). Shapefiles that are missing information may be rejected. Additional fields may be included, but they may not be recognized by NCDOT tools.

PROJECT STUDY AREA (POLYGON)

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile

Field Name	Required/Not Required	Type	Length	Description
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature
ProjURL	Automatic	String	254	SharePoint folder location in URL

Human Environment

Air Quality

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2EN2.3. Air Quality Report (PDF)	x-xxxx_AQR.PDF
2.	2EN2.3 Air Quality Report Addendum (as needed) (Document Set)	x-xxxx_STIP_AQR_Addendum (Document Set)

GIS File Uploads

No GIS data uploads have been identified as part of Air Quality.

Archaeology & Historical Architecture

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2EN2. Upload all Historic Architecture documents (Document Set)	x-xxxx_HistoricArchitecture (Document Set)
2.	2EN2. Upload all Archaeology documents (Document Set)	x-xxxx_Archaeology (Document Set)

GIS File Uploads

No GIS data uploads have been identified as part of Archaeology & Historic Architecture.

Community Characteristics Report (CCR)

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2EN2. Community Characteristics Report (PDF)	x-xxxx_CCR.PDF

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	File Name for upload
1.	2EN2. Direct Community Impact Area (GIS)	x-xxxx_ccrDCIA.zip
2.	2EN2. Demographic Study Area Boundary (GIS)	x-xxxx_ccrDSA.zip

Spatial Data Specifications

DIRECT COMMUNITY IMPACT AREA (POLYGON)

Content: Delineated area to be assessed for direct impacts.

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature

DEMOGRAPHIC STUDY AREA (POLYGON)

Content: Delineated based on the extents of the DCIA and represents all Block Groups that overlap with the DCIA and contain the population group for which demographic data will be analyzed.

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature

Community Impacts Assessment (CIA)

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2EN2. Community Impact Assessment (CIA), Direct and Indirect Screening Tool (DIST), Environmental Justice (EJ), Farmland, Pedestrian Accessibility and Count Tool (PACT) and other tech memos	x-xxxx_CIA_or_DIST_and_CommunityTechMemos (Document Set)

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	File Name for upload
1.	2EN2. Direct Community Impact Area (GIS)	x-xxxx_ciaDCIA.zip
2.	2EN2. Demographic Study Area Boundary (GIS)	x-xxxx_ciaDSA.zip

Spatial Data Specifications

The following fields are required parts of the shapefile and must be (based on Required/Not Required field). Shapefiles that are missing information may be rejected. Additional fields may be included, but they may not be recognized by NCDOT tools.

CIA DIRECT COMMUNITY IMPACT AREA (POLYGON)

Content: Delineated area to be assessed for direct impacts

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint

Field Name	Required/Not Required	Type	Length	Description
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature

CIA Demographic Study Area (polygon)

Content: Delineated based on the extents of the DCIA and represents all Block Groups that overlap with the DCIA and contain the population group for which demographic data will be analyzed.

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature

Indirect and Cumulative Effects / Indirect and Cumulative Impacts (ICE/ICI)

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2EN2. ICE Screening Report (PDF)	x-xxxx_ICEReport.PDF
2.	2EN2. LUSA documentation (PDF)	x-xxxx_LUSA.PDF
3.	2EN2. Quantitative LUSA documentation (PDF)	x-xxxx_QLUSA.PDF
4.	2EN2. ICI Study Report (PDF)	x-xxxx_ICIReport.PDF

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	File Name for upload
1.	2EN2. Future Land Use Study Area (GIS)	x-xxxx_iceFLUSA.zip
2.	2EN1. Probable Development Area (PDA) study area (GIS)	x-xxxx_ProbableDevArea.zip

Spatial Data Specifications

The following fields are required parts of the shapefile and must be (based on Required/Not Required field). Shapefiles that are missing information may be rejected. Additional fields may be included, but they may not be recognized by NCDOT tools.

Future Land Use Study Area (ICE) (polygon)

Content: Delineated area of all parcels that could be indirectly affected by the project and combined projects.

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature

Probable development area (PDA) (polygon)

Content: Areas of probable development identified

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created

Field Name	Required/Not Required	Type	Length	Description
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature
SHAPE_Area	Automatic	Double	19	Area of feature
LUSADate	Not Required	String	12	Date LUSA was approved
Division	Not Required	String	100	NCDOT Division
County	Not Required	String	100	North Carolina County
MuniName	Not Required	String	100	Municipality
MPORPO	Not Required	String	100	Municipal or Rural Planning Organization
PDANo	Not Required	String	50	Probable Development Area Number

Noise Analysis

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2EN2.3. Traffic Noise Report (PDF)	x-xxxx_TNR.PDF
2.	2EN2.3. Traffic Noise Report Addendum (Document Set)	x-xxxx_STIP_TNR_Addendum (Document Set)
3.	2EN3. Design Noise Report (PDF)	x-xxxx_DNR.PDF
4.	2EN3. Design Noise Report Addendum (Document Set)	x-xxxx_DNRAddendum (Document Set)
5.	3EN1. Memorandum on Noise Wall Balloting Results (PDF)	x-xxxx_NoiseWallBallotingResults.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Noise Analysis.

Public Involvement

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1PI1. If sent, please upload Local Official Informational Briefing letter (PDF).	x-xxxx_LOI.PDF
2.	2PI1. If produced for the project, upload the Public Involvement Plan (PDF).	x-xxxx_PublicInvolvementPlan.PDF
3.	2PI1. Upload Visualization(s) (ZIP).	x-xxxx_Visualization1.Generic Zip
4.	2PI1. Upload Video(s) (ZIP).	x-xxxx_Video1.Generic Zip
5.	Public Involvement Event 1 Final Meeting Materials	xxxxx_PI_Event_1_Meeting_Materials (Document set)
6.	2PI1. Upload Visualization(s) (ZIP).	x-xxxx_Visualization2.Generic Zip

	Upload	File Name for upload
7.	2PI1. Upload Video(s) (ZIP).	x-xxxx_Video2.Generic Zip
8.	2PI1. Public Involvement Event 2 - Final Meeting Materials (Document Set)	x-xxxx_PI_Event_2_Meeting_Materials (Document Set)
9.	2PI1. Upload Visualization(s) (ZIP).	x-xxxx_Visualization3.Generic Zip
10.	2PI1. Upload Video(s) (ZIP).	x-xxxx_Video3.Generic Zip
11.	2PI1. Public Involvement Event 3 - Final Meeting Materials (Document Set)	x-xxxx_PI_Event_3_Meeting_Materials (Document Set)
12.	2PI1. Upload Visualization(s) (ZIP).	x-xxxx_Visualization4.Generic Zip
13.	2PI1. Upload Video(s) (ZIP).	x-xxxx_Video4.Generic Zip
14.	2PI1. Public Involvement Event 4 - Final Meeting Materials (Document Set)	x-xxxx_PI_Event_4_Meeting_Materials (Document Set)
15.	Project Mailing List Boundary	xxxxx.ProjectMailingList.pdf

GIS File Uploads

No GIS data uploads have been identified as part of Public Involvement.

Tribal

The following section has no GIS upload controls, however, there are qualitative questions that need to be addressed.

Project Documentation Uploads

No document uploads have been identified as part of Tribal.

GIS File Uploads

No GIS data uploads have been identified as part of Tribal.

Natural Environment

Natural Resources

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2EN1. Upload Water Resources File (DGN)	x-xxxx_WaterResourcesFile.DGN
2.	2EN1. Upload Preliminary Jurisdictional Determination Package (PDF)	x-xxxx_PJDPackage.PDF
3.	2EN1. Upload Natural Resource Report (NRTR)	x-xxxx_NRTR.PDF
4.	2EN1. If yes, upload NRTR Addendum (PDF)	x-xxxx_NRTRAddendum.PDF

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	File Name for upload
1.	2EN1. Upload Delineated Wetlands GIS (SHP)	x-xxxx_DelineatedWetlands.zip
2.	2EN1. Upload Delineated Streams GIS (SHP)	x-xxxx_DelineatedStreams.zip
3.	2EN1. Upload Delineated Open Waters GIS (SHP)	x-xxxx_DelineatedOpenWaters.zip

Spatial Data Specifications

DELINEATED WETLANDS (POLYGON)

Content: Wetland Locations Jump to Expected Values

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
MapID	Required	String	20	Map ID used in the NRTR map
Type	Not Required	String	100	Name of body of water
Rating	Not Required	String	20	Rating (NCWAM)
HydroClass	Not Required	String	20	Hydrological classification
Cowardin	Not Required	String	20	Classification of Wetlands and Deepwater Habitats
AreaInSA	Not Required	Double	19	Area (in acres) of water body within the study area
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
Shape_Leng	Automatic	Double	19	Length of feature
Shape_Area	Automatic	Double	19	Area of feature
ProjURL	Automatic	String	254	SharePoint folder location in URL

Spatial Data Specifications

DELINEATED STREAMS (POLYLINE)

Content: Streams Location Jump to Expected Values

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
MapID	Not Required	String	20	Map ID used in the NRTR map
Type	Not Required	String	100	Classification (NCSAM)
Rating	Not Required	String	20	Rating (NCSAM)
HydroClass	Not Required	String	20	Hydrological classification
Buffer	Not Required	String	10	Is the stream located in a buffer basin?
LenInSA	Not Required	Double	19	Linear feet of stream within study area
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
Shape_Leng	Automatic	Double	19	Length of feature
ProjURL	Automatic	String	254	SharePoint folder location in URL

Spatial Data Specifications

DELINEATED OPEN WATERS (POLYGON)

Content: Open Waters Location

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
MapID	Not Required	String	20	Map ID used in the NRTR map
Name	Not Required	String	100	Name of body of water
AreaInSA	Not Required	Double	19	Open water area in Study Area
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
Shape_Leng	Automatic	Double	19	Length of feature
Shape_Area	Automatic	Double	19	Area of feature
ProjURL	Automatic	String	254	SharePoint folder location in URL

Permitting

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	3EN3. Upload Application Package	x-xxxx_ApplicationPackage1 (Document Set)
2.	3EN3. Upload Permit Package	x-xxxx_PermitPackage1 (Document Set)

GIS File Uploads

No GIS data uploads have been identified as part of Permitting.

Threatened & Endangered Species

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages. Secured data uploaded to ATLAS is ArcGIS Portal Group Secured and not acceptable across the enterprise.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	Secure	File Name for upload
1.	2EN1. Aquatic Survey Report (Document Set)	Yes	x-xxxx_AquaticSurveyReport (Document Set)
2.	2EN1. Aquatic Data Sheet (Document Set)	Yes	x-xxxx_AquaticDataSheet (Document Set)
3.	2EN1. Red-cockaded woodpecker (RCW) Survey Report (Document Set)	Yes	x-xxxx_RCWSurveyReport (Document Set)
4.	2EN1. Bat Habitat Assessment Forms (Document Set)	Yes	x-xxxx_BatHabitatAssessment (Document Set)
5.	2EN1. Bat Survey Report (Document Set	Yes	x-xxxx_BatSurveyReport (Document Set)

	Upload	Secure	File Name for upload
6.	2EN1. Other Species Survey Report (Document Set)	Yes	x-xxxx_OtherSpeciesSurvey (Document Set)
7.	2EN1. Terrestrial Plants Survey Report (Document Set)	Yes	x-xxxx_TerrestrialPlantsSurvey (Document Set)
8.	2EN1. SAV Survey Report (Document Set)		x-xxxx_SAVSurveyReport (Document Set)
9.	2EN1. Biological Assessment (Document Set)		x-xxxx_BA (Document Set)
10.	Amended Biological Assessment (Document Set)		x-xxxx_AmendedBA (Document Set)
11.	2EN1. Biological Opinion (Document Set)		x-xxxx_BO (Document Set)
12.	Amended Biological Opinion (Document Set)		x-xxxx_AmendedBO (Document Set)
13.	2EN1. Biological Evaluation (Document Set)		x-xxxx_BE (Document Set)
14.	USFWS IPaC Letter (Document Set)		x-xxxx_IPaCLetter (Document Set)
15.	Natural Heritage Program (NHP) Letter	Yes	x-xxxx_NHPLetter (Document Set)
16.	USFWS PBO Compliance Documentation		x-xxxx_PBOCompliance (Document Set)

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	Secure	File Name for upload
1.	2EN1. Aquatic Survey Start and End Points (GIS)	Yes	x-xxxx_AquaticSurveyLocation.zip
2.	2EN1. Aquatic Survey Reach (GIS)	Yes	x-xxxx_AquaticSurveyReach.zip
3.	2EN1. RCW Study Area (GIS)	Yes	x-xxxx_RCWStudyArea.zip
4.	2EN1. Protected Species Point (GIS)	Yes	x-xxxx_ProtectedSpeciesPoint.zip
5.	2EN1. Protected Species Polygon (GIS)	Yes	x-xxxx_ProtectedSpeciesPolygon.zip

Spatial Data Specifications

AQUATIC SURVEY LOCATION (POINT)

Content: Survey Location

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL

AQUATIC SURVEY REACH (POLYLINE)

Content: Survey reach along linear water feature

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data

Field Name	Required/Not Required	Type	Length	Description
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
Shape_Leng	Automatic	Double	19	Length of feature

RCW Study Area (polygon)

Content: RCW survey area

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
Shape_Leng	Automatic	Double	19	Length of feature

Field Name	Required/Not Required	Type	Length	Description
Shape_Area	Automatic	Double	19	Area of feature

PROTECTED SPECIES POINT (POINT)

Content: Points of protected species locations. Jump to Expected Values

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
ComName	Not Required	String	100	Species common name
SciName	Not Required	String	100	Species scientific name
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
SurveyDate	Not Required	Date	8	Date survey conducted for element occurrence
FirstObs	Not Required	Date	8	Date element occurrence was first observed
HabCom	Not Required	String	254	Brief description of the known habitats in which element is found
PhysProv	Not Required	String	254	Known physiographic provinces in which the element occurs.
SurveySite	Not Required	String	254	Description of Survey site

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
EOData	Not Required	String	254	Element Occurrence data description
Surveyors	Not Required	String	254	Name of surveyors
GenDesc	Not Required	String	254	General description
ProjURL	Automatic	String	254	SharePoint folder location in URL

PROTECTED SPECIES POLYGONS (POLYGON)

Content: Polygon area field collected with GPS or drawn from multiple protected species point locations. For full list of species see here. Jump to Expected Values

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
ComNam	Not Required	String	100	Species common name
SciNam	Not Required	String	100	Species scientific name
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
SurveyDate	Not Required	Date	8	Date survey conducted
FirstObs	Not Required	Date	8	Date element was first observed

Field Name	Required/Not Required	Type	Length	Description
HabCom	Not Required	String	254	Brief description of known habitat in which an element is found
PhysProv	Not Required	String	254	Known physiographic provinces in which the element occurs
Acres	Not Required	Double	19	Area occupied by element occurrence
SurveySite	Not Required	String	254	Description of survey site
EOData	Not Required	String	254	Elemental Occurrence data description
Surveyors	Not Required	String	254	Name of surveyors
GenDesc	Not Required	String	254	General description
ProjURL	Automatic	String	254	SharePoint folder location in URL
Shape_Leng	Automatic	Double	19	Length of feature
Shape_Area	Automatic	Double	19	Area of feature

Design

Bicycle, Pedestrian, & Transit

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1IM2. Upload Complete Streets Review Assessment (CSRA) following review late Stage 1/early Stage 2.	x-xxxx_CompleteStreetsProjectSheet.PDF

	Upload	File Name for upload
2.	2IM1. Upload Complete Streets Review Assessment (CSRA) after completion of the NEPA/SEPA document and Field Inspection Plans.	x-xxxx_CompleteStreetsReviewAssessment.PDF
2.	2IM1.If yes, attach a memo, resolution, or copy of email documenting exception approval by the Complete Streets Review Team.	x-xxxx_CompleteStreetsException.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Bicycle, Pedestrian & Transit.

Geo-Environmental

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1GT1. GeoEnvironmental Scoping Comments (PDF)	x-xxxx_GE_PreScopingComments.PDF
2.	2GT1. GeoEnvironmental Phase 1 Report (PDF)	x-xxxx_GE_Ph1Report.PDF

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	File Name for upload
1.	2GT1. GeoEnvironmental Sites of Concern (GIS).	x-xxxx_GESitesofConcern.zip

Spatial Data Specifications

The following fields are required parts of the shapefile and must be (based on Required/Not Required field). Shapefiles that are missing information may be rejected. Additional fields may be included, but they may not be recognized by NCDOT tools.

GeoEnvironmental Sites of Concern (point)

Content: This shapefile should include Pre-Scoping and Phase I sites.

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjMgr	Not Required	String	50	GeoEnvironmental Project Manager Name
ParcelNo	Not Required	String	20	NCDOT Parcel Number
ProName	Not Required	String	254	Business Name
ProAdr	Not Required	String	50	Property Address line 1
ProAdr2	Not Required	String	50	Property Address line 2
ProCity	Not Required	String	50	Property City
ProCounty	Not Required	String	100	Property Zip code
ProZip	Not Required	String	15	Property County
ProPh	Not Required	String	15	Property Phone Number

Field Name	Required/Not Required	Type	Length	Description
USTOwnName	Not Required	String	254	Underground Storage Tank Owner Name
USTOwnAdr	Not Required	String	50	Underground Storage Tank Owner Address line 1
USTOwnAdr2	Not Required	String	50	Underground Storage Tank Owner Address line 2
USTOwnCity	Not Required	String	50	Underground Storage Tank Owner City
USTOwnStat	Not Required	String	20	Underground Storage Tank Owner State
USTOwnZip	Not Required	String	15	Underground Storage Tank Owner Zip code
ProOwnName	Not Required	String	254	Property Owner Name
ProOwnAdr	Not Required	String	50	Property Owner Address line 1
ProOwnAdr2	Not Required	String	50	Property Owner Address line 2
ProOwnCity	Not Required	String	50	Property Owner City
ProOwnStat	Not Required	String	20	Property Owner State
ProOwnZip	Not Required	String	15	Property Owner Zip code
ProOwnPh	Not Required	String	15	Property Owner Phone Number
Status	Not Required	String	50	Comments such as No Further Action, Tanks Removed, Additional Assessment Need
USTNo	Not Required	String	20	Underground Storage Tank Number
Contamn	Not Required	String	5	Is Site Contaminated? (Yes/No)
FacilityID	Not Required	String	10	Facility ID Number
IncType	Not Required	String	50	Incident Type / ID Number
SitePhoto	Not Required	String	254	Site Photograph
RptType	Not Required	String	50	Report Type: Pre-Scope, Phase I, Phase II, Phase III, or Other
EngFirm	Not Required	String	50	Prime Consulting Firm Responsible for the Product
RptDate	Not Required	Date	8	Date of Phase I, II or III Reports
SubConFirm	Not Required	String	50	Subcontracted Firm
EnteredBy	Not Required	String	5	Initials of Person Entering the Data

Field Name	Required/Not Required	Type	Length	Description
SiteNo	Not Required	String	10	Site Number from Phase I Report
AnticRisk	Not Required	String	15	Anticipated Risk to the Project, High, Moderate, or Low
SiteType	Not Required	String	30	Petroleum, Dry Cleaner, Landfill, Small Business, Manufacturing…
Lat	Not Required	Double	19	Latitude
Long	Not Required	Double	19	Longitude
ProjURL	Automatic	String	254	SharePoint folder location in URL

Geotechnical

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1GT1. Geotechnical Report for Planning (PDF).	x-xxxx_GeotechnicalReportPlanning.PDF
2.	1GT1. GeoEnvironmental Pre-Scoping Comments (PDF).	x-xxxx_GeoEnvironmentalPreScopingComments.PDF
3.	2GT3. Roadway Subsurface Investigation Inventory (Document Set).	x-xxxx_RoadwaySubsurfaceInvestigationInventory (Document Set)
4.	2GT2. Right-of-way Recommendation Report (PDF).	x-xxxx_ROWRecommendationReport.PDF
5.	2GT4/3GT1. Roadway Recommendation Report w/ Graphics (Document Set).	x-xxxx_RoadwayRecommendationRptGraphics (Document Set)
6.	2GT3. Pavement and Subgrade Investigation Report (PDF).	x-xxxx_PvmtSubgradeInvestigationReport.PDF

	Upload	File Name for upload
7.	2GT3. Pavement and Subgrade Investigation and Recommendations Report (PDF).	x-xxxx_PvmtSubgradeInvestigationRecommRpt.PDF
8.	3GT3. Structure Subsurface Investigation Inventory Report with Graphics (Document Set).	x-xxxx_StructSubsurfInvestigationInventoryRptGrphcs (Document Set)
9.	3GT3. Design Scour Report (PDF).	x-xxxx_DesignScourReport.PDF
10.	3GT3. Inventory and Foundation Recommendation Report (PDF).	x-xxxx_InventoryFoundationRecommRpt.PDF
11.	3GT3. Temporary Shoring Recommendations (PDF).	x-xxxx_TempShoringRecomm.PDF
12.	3GT3. Retaining Wall Recommendation Report with Details (Document Set).	x-xxxx_RetainingWallRecommRptDetails (Document Set)
13.	3GT3. Sound Barrier Subsurface Investigation Inventory Graphics (Document Set).	x-xxxx_SoundBarrierSubsurfInvestInventoryGrphcs (Document Set)
14.	3GT1. Project Special Provisions Package (Structure, Sound Barrier) (Document Set)	x-xxxx_ProjSpecialProvPkg_StrucSoundBarrier (Document Set)
15.	Infiltration Basin Investigation (Document Set).	x-xxxx_InfiltrationBasinInvestigation (Document Set)

GIS File Uploads

No GIS data uploads have been identified as part of Geotechnical.

Hydraulics

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2HY1. Hydraulic Planning Report (PDF).	x-xxxx_HYD_PlanningReport.PDF
2.	2HY1. Preliminary Stormwater Management Plan (PDF).	x-xxxx_HYD_PSMP.PDF
3.	2HY2. Final Hydroplaning Assessment (Document Set).	x-xxxx_HYD_FinalHydroplaningAssessment (Document Set)
4.	2HY2. Hydraulic Design Reports for Major Structures; BSRs and CSRs (Document Set).	x-xxxx_HDR (Document Set)
5.	2HY2. Drainage Plans for Field Inspection (PDF).	x-xxxx_HYD_DrainagePlansForFieldInspection.PDF
6.	3HY1. Final Redline Drainage Plans as a single file (PDF).	x-xxxx_HYD_DrainagePlans.PDF
7.	3HY1. Final Drainage Plan Computations as a single file that contains Storm Drain Comps, Inlet Comp, Outfall Analysis, Pipe Data Sheets, etc. (PDF).	x-xxxx_HYD_DrainageComps.PDF
8.	3HY1. approved SFC/CLOMR Packages (Document Set).	x-xxxx_ApprovedSFCCLOMRPackages (Document Set)
9.	3HY1. Completed Stormwater Management Plan (PDF).	x-xxxx_HYD_SMP.PDF
10.	3HY1. Completed Environmental Permit Drawings packaged in a zip file (ZIP).	x-xxxx_HYD_PermitDrawings.Generic Zip
11.	3HY1. Completed Environmental Permit Drawings (DGN).	x-xxxx_HYD_PermitDrawingsDGN.DGN
12.	5HY1. Construction Drainage Investigation Documentation (Document Set).	x-xxxx_DrainageInvestigation (Document Set)
13.	5HY1. Construction Support Documentation (Document Set).	x-xxxx_ConstructionSupport (Document Set)

GIS File Uploads

No GIS data uploads have been identified as part of Hydraulics.

Location & Surveys

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	4LS1. Final ROW Series Plan Set (Document Set).	x-xxxx_150RightOfWayPlans (Document Set)

GIS File Uploads

No GIS data uploads have been identified as part of Location & Surveys.

Pavement Design

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2PD1. Final Pavement Design Memo (PDF).	x-xxxx_FinalPavementDesignMemo.PDF
2.	3PD1. Shoulder Drain Memo (PDF).	x-xxxx_ShoulderDrainMemo.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Pavement Design.

Photogrammetry

Project Documentation Uploads

No documents have been identified as part of the Photogrammetry workflow.

GIS File Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Spatial Data Content	File Name for upload
1.	1LS1. Upload Limits of Survey (GIS).	x-xxxx_LimitsofSurvey.zip

Spatial Data Specifications

LIMITS OF SURVEY

Content: Project study area for Survey

Metadata for associated NCDOT ATLAS webservice

Field Name	Required/Not Required	Type	Length	Description
FID	Automatic	OID	4	System-defined unique identifier
Shape	Automatic	Geometry	0	System-defined geometry
ProjNumber	Required	String	254	Project Number from SharePoint
DateCreate	Required	Date	8	Date Shapefile was created
ContName	Not Required	String	254	Name of contractor that collected data
RptName	Required	String	254	Report name associated with the shapefile
DocURL	Automatic	String	254	Location of data on SharePoint
Notes	Not Required	String	254	User Notes

Field Name	Required/Not Required	Type	Length	Description
FromDate	Not Required	Date	8	Start of validity of data
ToDate	Not Required	Date	8	End of validity of data
SPProjID	Automatic	String	254	Internal field for SharePoint ProjectID
ProjURL	Automatic	String	254	SharePoint folder location in URL
SHAPE_Leng	Automatic	Double	19	Length of feature

Railroad

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1RR1. Scoping Response Letter (PDF).	x-xxxx_ScopingResponseLetter.PDF
2.	2RR1. Railroad PE Agreement (PDF).	x-xxxx_RailroadPEAgreement.PDF
3.	2RR1. Roadway Plans for Rail Review (PDF).	x-xxxx_RoadwayPlansForRailReview.PDF
4.	2RR1. Crossing Scope for Off-Site Detour (PDF).	x-xxxx_CrossingScopeOffSiteDetour.PDF
5.	4RR1. Railroad Agreements (PDF).	x-xxxx_RailroadAgreements.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Railroad.

Right of Way

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	Right of Way Plans (ROW)	xxxxx_ROW.pdf

GIS File Uploads

No GIS data uploads have been identified as part of ROW.

Roadside Environmental

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

	Upload	File Name for upload
1.	2RE1. Preliminary E&SC Field Inspection Plans (PDF).	x-xxxx_PreliminaryESCFieldInspectionPlans.PDF
2.	2RE1. ROW/Easement Request File (PDF).	x-xxxx_ROWEasementRequestFile.PDF
3.	3RE1. Final E&SC Plan Set (PDF).	x-xxxx_FinalESCPlanSet.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Roadside Environmental.

Roadway

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2RD1. Design Exception Request Package - Approved and Signed (PDF)	x-xxxx_DesignExceptionPackage.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Roadway.

Signing and Delineation

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2SD1. Preliminary Signing and Delineation Strip Map (PDF).	x-xxxx_PreliminarySDStripMap.PDF
2.	2SD1. Conflict resolution correspondence (Document Set).	x-xxxx_SDConflictResolutionCorrespondence (Document Set)

3.	2SD1. Plan Submittals (PDF).	x-xxxx_SDPlanSubmittals.PDF
4.	3SD1. Approved Strip Map (PDF).	x-xxxx_ApprovedSDStripMap.PDF
5.	3SD1. Overhead Sign Locations list (PDF).	x-xxxx_OverheadSignLocations.PDF
6.	3SD1. Final Plans (PDF).	x-xxxx_FinalSDPlans.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Signing and Delineation.

Utilities

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1UT2. Utility Risk Analysis and Inventory Report (PDF).	x-xxxx_UtilityRiskAnalysisAndInventoryReport.PDF
2.	1UT2. Utility Project Outline (PDF).	x-xxxx_UtilityProjectOutline.PDF
3.	1UT2. Utility Construction Requests (Document Set).	x-xxxx_UtilityConstructionRequests (Document Set)
4.	2UT1, 3UT1. Utilities Coordination Working Plans (PDF).	x-xxxx_UtilitiesCoordinationWorkingPlans.PDF
5.	2UT1. Relocation Schedule (PDF).	x-xxxx_RelocationSchedule.PDF
6.	2UT1. Utility Parcel List (PDF).	x-xxxx_UtilityParcelList.PDF
7.	3UT1. Utility Construction Agreement Packages (Document Set).	x-xxxx_UtilityConstructionAgreementPackages (Document Set)
8.	3UT1. Cost Responsibility Analysis Report (PDF).	x-xxxx_CostResponsibilityAnalysisReport.PDF
9.	3UT1. Permit Related Utility Plans (PDF).	x-xxxx_PermitRelatedUtilityPlans.PDF

	Upload	File Name for upload
10.	4UT1. Utilities by Others Plans (Document Set).	x-xxxx_UtilitiesByOthersPlans (Document Set)
11.	4UT1. Utility Construction Plans (Document Set).	x-xxxx_UtilityConstructionPlans (Document Set)
12.	4UT1. Water and Sewer Permits (Document Set).	x-xxxx_WaterAndSewerPermits (Document Set)
13.	4UT1. Executed Utility Agreements (Document Set).	x-xxxx_ExecutedUtilityAgreements (Document Set)
14.	4UT1. Utility Authorization Packages (Document Set).	x-xxxx_UtilityAuthorizationPackages (Document Set)
15.	4UT1. Utility Certification (PDF).	x-xxxx_UtilityCertification.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Utilities.

Value Management

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1VM1. Risk Assessment Study Report (PDF)	x-xxxx_RAStudyReport.PDF
2.	1VM1. Constructability Review Outputs (PDF)	x-xxxx_CROutputs.PDF
3.	2VM1. Value Engineering Study “Report” (PDF) (May be updated in 3VM1 and 4VM1)	x-xxxx_VEStudy.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Value Management.

Transportation Mobility and Safety

Congestion Management

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1TM1. Express Design Traffic Analysis Memorandum (PDF)	x-xxxx_ExpressDesignTrafficAnalysisMemo.PDF
2.	2TM1. Traffic Operations Analysis Technical Memorandum (PDF)	x-xxxx_TrafficOperationsAnalysisTechMemo.PDF
3.	2TM1. Interchange Access Report (IAR) (PDF) (Final approved version only)	x-xxxx_InterchangeAccessReport_IAR.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Congestion Management.

Signal Systems Timing & Operations

Project Documentation Uploads

No documents have been identified as part of the Signal Systems Timing & Operations workflow.

GIS File Uploads

No GIS data uploads have been identified as part of Signal Systems Timing & Operations.

Traffic Management

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	1TP2. Project Level Traffic Forecast Report (PDF)	x-xxxx_TrafficForecastReport.PDF
2.	1FS2. Capacity Analysis Report (PDF)	x-xxxx_CapacityAnalysisReport.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Traffic Management.

Traffic Safety

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2TS1. Supporting documents for Traffic Signal Recommendations if applicable. (PDF)	x-xxxx_TrafficSignalRecommendations .PDF
2.	2TS1. Traffic Safety Alternative Analysis supporting documents (PDF)	x-xxxx_AlternativesAnalysisReport.PDF

	Upload	File Name for upload
3.	2TS1. Safety Data and Analysis supporting documents (PDF)	x-xxxx_SafetyDataAnalysis.PDF
4.	2TS1. Roadway Plan Review (PDF)	x-xxxx_RoadwayPlanReview.PDF
5.	2TS1. TMP Review (PDF)	x-xxxx_TMPReview.PDF
6.	2TS1. Signing and Delineation Review (PDF)	x-xxxx_SigningDelineationReview.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Traffic Safety.

Traffic Systems Operations

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	2TO1. Traffic Operations Recommendations (PDF)	x-xxxx_TrafficOpsRecommendations.PDF
2.	2TO1. Initial Incident Management Strategies Recommendations (PDF)	x-xxxx_IncidentManagementStrategies.PDF
3.	Updated Operational Risk Assessment (PDF)	x-xxxx_OperationalRiskAssessment.PDF
4.	3TO1. Final Incident Management Plan (PDF).	x-xxxx_IncidentManagementPlan.PDF
5.	3TO1. Final Demand Management Plan (PDF)	x-xxxx_DemandManagementPlan.PDF
6.	3TO1. Final Traffic Operations Plan (PDF)	x-xxxx_TrafficOperationsPlan.PDF
7.	3TO1. Final Equipment List (XLSX)	x-xxxx_EquipmentList.XLSX

GIS File Uploads

No GIS data uploads have been identified as part of Traffic Systems Operations.

Transportation Signals and ITS Design

Project Documentation Uploads

The following documentation must be uploaded to the ATLAS Workbench connected to Connect Preconstruction project pages.

Notes about File Naming Standards:

Individual uploads will automatically be renamed to the file name indicated in the table below.

Uploads to a document set are not automatically renamed. If there is a guidance for naming files to a document set, it will be listed in the ATLAS Workbench directly above the upload.

	Upload	File Name for upload
1.	3SG1. Project Special Provisions (PDF)	x-xxxx_ProjectSpecialProvisions.PDF
2.	3SG1. Complete Project Documentation (PDF)	x-xxxx_CompleteProjectDocumentation.PDF

GIS File Uploads

No GIS data uploads have been identified as part of Transportation Signals and ITS Design.

APPENDIX A - Expected Values

Threatened & Endangered Species

Protected Species Point

Jump to Spatial Data deliverable

Field	Description	Expected Values
ComName	Species common name	Please refer to a current USFWS IPaC resource list, ATLAS USFWS Species Consultation Range (part 1 & part 2) layers, and/or ATLAS NMFS NOAA Species Consultation Range layer.
SciName	Species scientific name	Please refer to a current USFWS IPaC resource list, ATLAS USFWS Species Consultation Range (part 1 & part 2) layers, and/or ATLAS NMFS NOAA Species Consultation Range layer.
PhysProv	Physiographic Province Values	M Mountains (Blue Ridge) = All parts of North Carolina west of the foot of the Blue Ridge Escarpment. P Piedmont = All parts of North Carolina east of the foot of the Blue Ridge Escarpment and west of the Fall Line, including outlying "foothill" ranges, such as the Brushy, Uwharrie, Sauratown, and South mountains. S Sandhills = The southwestern portion of the Coastal Plain province consisting mostly of deep aeolian sands of the Middendorf and Pinehurst formation (portions of Cumberland, Harnett, Hoke, Lee, Moore, Richmond, Scotland, and Montgomery counties). The Sandhills are actually part of the Coastal Plain but are here distinguished because of their distinctive geomorphology and vegetation. C Coastal Plain = All parts of North Carolina east of the Fall Line, excluding the Sandhills region and those portions associated with tidal water (ocean, sounds, barrier islands, and mainland brackish or salt marshes). T Tidewater = That part of the state associated with tidal water, such as the ocean and barrier islands, sounds, estuaries, and mainland brackish or salt marshes.

Protected Species Polygon

Jump to Spatial Data deliverable

Field	Description	Expected Values
ComNam	Species common name	Please refer to a current USFWS IPaC resource list, ATLAS USFWS Species Consultation Range (part 1 & part 2) layers, and/or ATLAS NMFS NOAA Species Consultation Range layer.
SciNam	Species scientific name	Please refer to a current USFWS IPaC resource list, ATLAS USFWS Species Consultation Range (part 1 & part 2) layers, and/or ATLAS NMFS NOAA Species Consultation Range layer.
PhysProv	Physiographic Province Values	M Mountains (Blue Ridge) = All parts of North Carolina west of the foot of the Blue Ridge Escarpment. P Piedmont = All parts of North Carolina east of the foot of the Blue Ridge Escarpment and west of the Fall Line, including outlying "foothill" ranges, such as the Brushy, Uwharrie, Sauratown, and South mountains. S Sandhills = The southwestern portion of the Coastal Plain province consisting mostly of deep aeolian sands of the Middendorf and Pinehurst formation (portions of Cumberland, Harnett, Hoke, Lee, Moore, Richmond, Scotland, and Montgomery counties). The Sandhills are actually part of the Coastal Plain but are here distinguished because of their distinctive geomorphology and vegetation. C Coastal Plain = All parts of North Carolina east of the Fall Line but excluding the Sandhills region and those portions associated with tidal water (ocean, sounds, barrier islands, and mainland brackish or salt marshes). T Tidewater = That part of the state associated with tidal water, such as the ocean and barrier islands, sounds, estuaries and mainland brackish or salt marshes.

Natural Resources

Delineated Streams

Jump to Spatial Data deliverable

Field	Description	Expected Values
Type	NCSAM Stream type classification	“Oa1” “Oa2” “Oa3” “Oa4” “Ia1” “Ia2” “Ia3” “Ia4” “Ib1” “Ib2” “Ib3” “Ib4” “Pa1” “Pa2” “Pa3” “Pa4” “Pb1” “Pb2” “Pb3” “Pb4” “Ma1” “Ma2” “Ma3” “Ma4” “Mb1” “Mb2” “Mb3” “Mb4” “TM”
Rating	Rating from NCSAM	“High” “Medium” “Low”
HydroClass	Hydrological classification	“Riparian” “Non-Riparian”

Delineated Wetlands

Jump to Spatial Data deliverable

Field	Description	Expected Values
Type	NCWAM wetland type classification	“Salt/Brackish Marsh” “Estuarine Woody Wetland” “Tidal Freshwater Marsh” “Riverine Swamp Forest” “Seep” “Hardwood Flat” “Non-Riverine Swamp Forest” “Pocosin” “Pine Savanna” “Pine Flat” “Basin Wetland” “Bog” “Non-Tidal Freshwater Marsh” “Floodplain Pool” “Headwater Forest” “Bottomland Hardwood Forest”
Rating	Rating from NCWAM	“High” “Medium” “Low”
HydroClass	Hydrological classification	“Riparian” “Non-Riparian”

Cowardin	Classification of Wetlands and Deepwater Habitats	PFO1/EM1Bd	PEM1/SS4C	PSS4/1Sd	PSS1/EM1Fh
		PFO3/1E	E2EM1Ps	PFO1S	PSS3/1A
		PFO4Bg	PSS4/1Cd	PFO4/SS3C	PFO4/SS7B
		PSS2F	PFO1/SS1R	PSS4E	PFO/SS1Fh
		PSS5F	E2SS4/EM1Pd	R1UBVx	R5UBFx
		L1UBHh	PEM5Ch	PFO4/SS7Bd	PSS2/1F
		PFO4/3B	PEM1/AB4F	PEM1/SS4A	PSS3/FO4B
		E2US2P	PSST	PSS1/EM1Ax	L1UB1Kx
		PFO4Bb	PSS3/4Bh	PAB4Gh	PFO6Bd
		PSS5Fd	PFO1/4Cd	PEM1/SS3B	L2UBHh
		E2USMh	PFO5Fx	E2USNs	PEM1/FO4B
		E2SS3/EM1Pd	PEM5Rh	Pf	PSS4/3B
		PFO3/4Bd	PFO1Kx	PFO1/2Ch	PUB/SS5F
		E2SS3/1P	PFO6F	PFO1Ab	E2FO4/1P
		E2FO1/4Ps	PSS3/FO4Bd	E2EM5Ps	PFO1/SS4R
		E2US2/EM1Pd	PFO1/2Rd	PAB/EM1Fx	PEM1/SS1Sd
		PSS1/3Ah	PAB3G	PFO3/SS1B	PFO2/1E
		PUSC	E2USM	PEM1/FO1A	PUBHb
		PSS7A	E2EM1/USN	PSS1Ad	E2SS3/4Ps
		E2EM1/USN6	PFO5/EM1Fh	PUB3G	PFO1Cb
		L2UBGx	PFO2/1Bd	PFO6Ch	PFO5Fh
		E2EM1/USPd	PUS2Ch	PUBGb	R2UB2H
		PSS4C	PFO1/2Cb	PFO4Ch	E2USN6
		PFO1/SS3R	E2EM1/US2P	R3RB1H	PSS1/5Fh
		PABF	PSS7Cd	PSS1E	PFO1/5F
		R3RSA	PFO4Ah	R4SB2C	PUS2C
		PFO1/5Fh	R3UB2H	PSS6/EM1F	PSS7C
		PEM1/SS1Eb	M2USP	PFO5/EM1F	PFO4/EM1C
		PSS3/EM1Bd	PABH	PEM1Th	PSS4/FO1A
		PFO1/SS1Ch	PSS5/EM1F	PEM1/SS1A	PFO4/1Ch

		PEM1/FO4R	PFO3Ah	PFO/SS1Ch	PFO1T
		L1RB1Hx	PSS1F	PUBFd	PFO1/4Ah
		PUBV	PFO4/2C	PUB/ABHh	PFO2Fx
		L2AB3Fh	PSS6Fx	PUB1Hx	PFO4/SS3R
		PFO7/6Bd	PSS3C	PSS4/1A	PSS/FO4A
		PFO2/SS1B	PAB4Fb	PFO6/UBT	PFO5/UBH
		PFO3E	PEM1A	E2SS1/3P	PUB/FO1Fh
		PFO1/3Ch	PFO1B	PSS/FO1Ch	R2UBHx
		PAB4G	PEM1/FO1B	PFO4/1Bg	E2SS1P
		PUB/SS1F	PFO4/2Bd	PFO/EM1Cb	PUB/EM1Fb
		PEM5Fd	PFO1/SS7R	PFO4/EM1A	PFO1/EM1Cb
		PFO1/2Ad	PFO4Cx	PFO2/4Cd	PUBG
		PFO6/SS1B	PEM1/SS3K	PFO1/SS3Cd	PSS1/3Bd
		PSS7/6B	PFO1/EM1Fh	PSS6/7A	PSS3/1B
		PSS3Bd	E2SS4/1Ps	E2FO4/EM1Pd	L1ABHh
		PFO4/SS1R	PSS3E	PSS1/3Rd	PSS1Cd
		L2USAh	PSS1/USK	PFO1/SS3Bh	PSS4/EM1B
		PSS1C	L1ABHx	PSS1/FO1Fd	PSS6/FO7B
		PSS4R	E2EM1/SS3P	R2UB3H	PSS4/3C
		PEM1F	L1UBKx	PFO4/SS3Bd	PABK
		PFO2E	PFOT	PFO6T	PFO4/SS1Ad
		PFO4/1B	PSS1/2Fx	PSS4/1R	PSS1Ch
		PFO4/SS4S	E2FO3/1P	E2EM1P5	PEM1Sh
		PFO1R	E1UB2L	PEM5Bd	PSS1Ab
		E2SS1/EM1Pd	PFO1/4S	PSS1/FO2R	PFO1/SS3B
		PSS6/7C	PSS1/4Bd	PFO2T	PFO2A
		PFO6Cd	PEM1Ex	PFO6/4B	PSS1/FO1Ad
		R4SBAr	PFO3Bd	PFO2/3C	PFO7B
		E2SS7Ps	PFO3/1B	PUSCh	PAB3Gh
		PSS2Fh	PFO1/2Fx	PFO2Ad	PUSKx

		PFO1/ABF	PEM1Cd	PSS/EM1Fh	PSS1/4A
		PEM1/SS1R	PFO5H	E2EM1Pd	PSS1Ed
		PFO1/EM1A	M1UBL	PSS1/3B	PFO4/EM1B
		PFO/SS1Bd	E2SS3/1Ps	PFO1/2Fh	PFO2Rd
		PSS1/FO4B	E2FO4P	PSS6C	PUB/SS1Fh
		PSS/EM1B	L2US3Ah	PSS7/6Bd	PAB3Hb
		PFO1/4Bg	PEM1/SS4B	PSS1Rd	E2USPh
		PFO1Fh	PUBFh	PFO1/SS1F	PFO1/SS1A
		L2AB3H	E2SS7P	PFO1/4Eh	PSS6F
		PFO/SS4Bd	E2EM1/FO4P	PSS5Hx	PSS4/3Cd
		PFO3/SS1Bd	PFO4/3R	PSS1/EM1K	PSS1/FO1B
		PFO4Ax	PSS1/UBFb	PUBHx	PFO1Bb
		PSS1/2Ch	R2UBH	E2SS3Ps	PUSAh
		E2FO3/4Ps	PUB3Hh	PFO5Gh	R2UBHh
		L2UBVh	PSS1/FO1R	PUB1G	L2USCx
		PSS4Cd	PEM1K	E2US2/EM1P	E2SS1/4Ps
		PSS1/3Cd	PSS1/4Ed	PSS1/UBF	PFO3/SS4Bd
		PEM1S	E2FO3/4P	PSS1/EM1Ch	PAB/SS1F
		E1ABLx	PFO4/3Cd	PSS1/2T	PEM1/SS4Rd
		E2SS4P	PFOCd	PFO1/4B	PSS4/FO1Bd
		PSS4/EM1R	PFO1Eh	PFO1/SS4Bd	PSS1/4Cb
		PFO4/SS1B	E1UBL6	PFO1/SS3Bd	PSS/FO1B
		PFO/SS1Cb	PSS1/EM1A	PUB/ABFb	PFO3/1C
		PEM1/SS1Cb	L1UBHx	E2SS4Ph	E2FO5P
		PSS6/FO7A	PFO2/1B	PSS3/4Cd	PFO1/4Ch
		PFO4/SS4A	E2SS4/EM1P	L1UB4H	PFO4/3Bd
		E2EM1Nh	PSS4B	PSS3Rd	PSS4/FO4Cd
		PSS6A	PSS7Ad	L2US3C	E2US/EM1P
		PFO1/3C	PSS6/7Bd	PSS3Cx	L1UB3H
		PAB4Fh	PSS7/EM1B	PEM1Tb	PEM1Cx

		E2SS4/EM1P6	PSS1/4Ad	PSS1Rh	PFO/EM1A
		PFO1/4Ab	PABFx	PFO1/UBFx	PFO2Bd
		PFO3/4Rd	PSS1/EM1C	PSS3/FO1A	PAB3Fb
		E2EM1Nd6	PFO1/EM1Rd	L1UB3Hh	PFO4A
		PEM1R	R3USAr	PFO4/EM1R	PUB1Kx
		PFO6/SS6B	E2SS5M	E2SS1/EM5Pd	PUS/EM1Ah
		PFO4/1Cd	L1UBH	PFO1/SS4B	E2EM1/SS7Ps
		PEM2Fh	PSS1/EM1R	PSS1/FO2C	PSS1Fb
		PFO1/SS4C	M1ABL	E2SS3/USP	PEM1Eh
		PFO1/SS1Cd	PSS6Fh	E2ABN	E1UB3L
		E2FO4Ps	PFO6/4Bg	PFO6/SS6F	L2EM2F
		PSS1/FO4C	PFO6/7B	E2EM1/SS4P6	PSS4/FO3Bd
		R2UBFx	PFO1/4Cb	PEM1/SS1T	PUSAx
		R2ABHh	E2EM1/SS1Pd	PFO6Fh	PFO2/1Fd
		PFO4Rd	PFO1/3Ad	PFO1/2A	PSS1/3E
		PFO1/4C	PUB3Hx	E2SS3/EM1P	PUBFx
		PUBH	PSS5Hh	PFO1/4A	E2SS3/4Ph
		L1ABH	L1UBGh	PSS1/2Fb	PFO1/SS1Fh
		PAB1Fh	PUB/ABH	PFO4Cd	PSS1/4Ch
		PSS1/4Ah	PFO1/2C	PSS1/5Fd	E2EM5Ph
		PEM1Rd	PAB4F	PSS1/2Ad	E2US3N
		PFO3/1A	PSS2/1A	PFO1Eb	E2SS3/4Pd
		PEM1Ad	PEM1/SS1Ch	PSS1/EM1Sd	PSS1S
		PSS3/1C	R2UBF	PFO6/UBF	PFO1/SS3Ed
		PUB3Fh	E2SS3P6	PSS4/EM1Sd	L2USCh
		PEM1C	PUBFb	PFO5/1Fh	R3US3C
		PFO3/SS3Bd	E2USPd	E2RSP	PEM1/SS1Ad
		PSS3/FO1Bb	PFO1/SS3A	PFO7C	PSS1/2Cb
		PEM5T	PSS6/FO1B	PFO3/2C	PSS1/2Fh
		PSS1Kx	PSS1/FO2F	PEM1/SST	PFO7A

		E2SS1/4P	L2ABVh	PUBF	PSS1/4R
		PSS4/EM1Ad	L2UB/EM2Gh	PFO1/2Fb	PSS1Rs
		E2EM1/SS4P	L2ABHh	L1ABK	PSS3/FO1B
		E1UBL	PSS4/FO1C	PFO6/EM1F	PEM5Ad
		L2UB3Fh	PABFh	PFO3/EM1B	L1UB1Hx
		PFO6E	PFO2/1C	PSS3/FO1Ad	PSS2/1C
		PSS3/FO4A	PUB/FO5Hb	PEM1/FO2F	PUBKx
		PAB4Fx	E1UB4L6	PSS3/FO4Cd	PSS4Ax
		E2SS1/3Ps	PFO4/SS1C	R1UBV	PFO/EM1Ch
		PEM5F	E2US2M	R2AB1H	PSS6/7Ad
		PFO1/4E	PSS3/FO1Cd	PFO1/2F	PFO1/2E
		L2AB3Hx	PUSAd	R2UBFh	PSS3/EM1Ch
		PFO4/SS1Cd	PFO2/SS4B	E2EM1Pd6	PFO1Cx
		PEM1/FO5F	M2USN	PSS1/FO5Fb	PFO5Hh
		PSS3Ch	PSS3/1E	PEM1/SS4Ad	L2UBFx
		PFO4/1Ah	PSS/EM1Eh	PFO5Hb	PABFd
		PEM1Sd	PEM5Th	PUSA	PSS6Ch
		PSS1Fh	E2USN	E2EM1/USP	PFO6Fb
		PSS1/3C	PSS1Eh	PSS3/FO3B	R2UB1H
		PFO5/SS1F	PFO1/2Cd	PSS4/1Bd	M2USM
		M2US2M	PFO1/SS1Ah	PFO2Cb	PSS1/EM1Fd
		PFO1/UBF	E2EM5/SS4Pd	PSS/EM1Fb	PEM1/FO1Cd
		PSS4/1C	PSS1Sh	PFO1A	PFO5/UBF
		PSS1Bx	R5UBH	E2SS1/EM1P6	PEM1Kx
		PFO4S	PSS1/3Ad	PEM1/SS3Cd	PFO4/SS3Cd
		E2SS6P	L2AB3K	PAB/EM1F	PFO7Ad
		PFO2F	E2SS5P	PFO6A	PSS3/FO4C
		PFO1/4Rd	PFO1Ax	PAB3H	PFO4C
		PSS5/FO5F	E2RS2Pr	PEM1/FO1Ad	PFO1/SS1B
		PSS1Fd	E1UBLh	PFO2/1A	PEM1T

		PSS6T	PSS3/4Rd	PSS4/FO1Ad	R2RSC
		PFO4/SS4Cd	PSS4/EM1Cd	PFO/EM1Fb	M2RS2Pr
		L2ABF	PFO3/4Ad	PFO2R	PEM1/FO1F
		PFO4/1Bh	PFO4/2B	PSS6B	PEM1/FO4A
		PEM1/SS1Fh	PSS3Ad	PSS1Cx	PSS1/EM1Fb
		PSS3/1Bd	PFO/UBFx	PFO3/4C	PFO2Ed
		PSS4/2B	E2USPs	E2FO1/4P	PEM5Cd
		R4SB1C	PSS7/FO2B	PEM1/SS4E	PSS4/FO3B
		E2FO4/EM1P	PFO4/SS4R	PSS2C	PSS1/4Cd
		L2EM2Gh	PEM1/SS1Eh	PFO3/2B	PSS1/FO4Ad
		L2UBHx	PEM1/SS1Rd	PSS4Ad	L1UBK
		R3US1C	E2US2P6	R3UBH	M2US2N
		E2EM1Px	E2EM1Ph	PFO4/SS4B	PSS/EM1Ad
		PEM1Ax	PSSF	PFO2/SS1C	PFO5G
		PSS1/FO4Ed	PFO4E	PUBGh	PFO1/EM1Sd
		L2UB3Kx	PSS3Cd	PSS4/FO1B	PSS1/FO3C
		PSS4/3Bd	PSS1/EM1F	R1UB3V	PFO2B
		PFO3/SS4B	PSS1/EM1E	PSS1Eb	R3RB2H
		PSS1/3A	E2FO1P	PAB3Hx	PSS7R
		PFO3Rd	PFO1/3E	PFO1Ah	PSS6/UBF
		PFO1/SS1E	PFO5/EM1Fb	PFO5/1F	PSS4S
		PFO4/3Ad	PFO3R	PFO4/EM1Cd	PSS/FO1Eh
		PFO3Ch	PFO3B	PEM1/SS1Fb	PSS4Sd
		R4SBCx	L2UBH	PEM1/FO1C	PSS1/FO1A
		R2UBG	PSS4Cx	PAB3Fh	R3RBF
		PFO1/2T	PEM1/UBFh	PSS6/EM1T	PFO1/EM1F
		PSS1/4S	PFO4/1Ax	PUB/FO5F	PSS/EM1C
		PUB/FO5Hx	PFO/SS1Eb	PFO4/1R	PFO4/SS3A
		PEM1/SS3A	E2FO3Pd	PSS1B	PSS1/4C
		PFO1/4Sd	PUB/FO5Fb	PFO2/4B	PFO4/2A

		PAB4Hh	PFO4/SS4C	PFO1/3Cd	E2SS4/1P
		PSS1Ah	PFO4Ad	PFO5Gb	PSS4/FO4B
		PFO2/EM1F	PSS/EM1Eb	PSS1Cb	R1ABV
		PFO4/SS3Ad	E2USMs	PSS1/FO1Fb	E2EM1N
		R4SB3C	PSS4Rs	E2EM1Nd	R2USCx
		PFO/SS1Ad	PUSCx	PSS1A	E2SS4/1Pd
		PUBKr	PFO6C	PFO1Ch	PUB/FO1Fb
		PSS3B	PSS6Fd	PSS/EM1Ch	PFO2C
		PEM1Bd	PSS4/FO4Ad	PSS1/2C	PFO1/UBFh
		PSS1/FO1E	PSS6/7B	PUSCd	PFO/SS4B
		E2FO4/1Ps	E2EM1Ns	PUBGx	PAB3Fx
		L2USC	PFO1/EM1B	PAB4H	PSS4/EM1Rd
		PSS1/FO1Rd	PFO1Cd	PFO6Fd	L2US2J
		PSS1/EM2F	PFO7/1B	PEM5R	PSS4/EM1A
		R3USC	PEM1/SS3Bd	PEM1Fb	PSS1/FO4Rd
		L2USA	PSS1/FO4A	PUB3Kr	E2FO4/SS4P
		PSS3Ah	PFO1/5Fb	PFO1/3Bd	PFO1/SS5F
		L2EM2Hh	E2EM1/SS1P6	PEM1/SS1B	PSS3/ABC
		PFO1/7B	PFO1/2Eh	PFO1/3B	E2US2Ps
		PSS5/FO1F	PFO4Cs	PFO4/SS1A	PSS1/FO1F
		PFO4Bdg	PEM1B	PFO3/1Bd	PSS3/FO4Rd
		PFO4/2Cd	E2EM1/SS1P	E2FO4P6	PFO4/SS6B
		E2ABM	PEM1/FO1Sd	E2USMd	E2SS3P
		PSS/FO1Eb	PSS3/EM1R	PSS3R	E2USP
		PSS4/3Ad	PFO3/1Ad	PFO1/4Ad	R3UB3H
		L2USAx	PSS1T	PFO7Bd	PFO1/2R
		PEM1/FO4Ad	PFO4/3C	PFO1/2Fd	PAB/FO1F
		E2FO1P6	R3USA	PFO/EM1Eb	E2SS1/3Pd
		PSS7/FO6B	PSS3/2C	E2SS7Pd	PFO7/SS7B
		R1USQ	E2US/EM1N	PSS1R	PFO3C

		PFO4/EM1Ad	PSS7/6C	E2USM6	PFO4/1Bd
		PSS1/FO3B	PEM1/FO1Fd	R2USA	PSS3/4A
		R3UBF	PSS1Td	PFO1/4R	PSS/FO1Ad
		PFO1/EM1Fd	PSS1/4E	PFO1C	R2UBGx
		R3UBHx	E2EM1/SS4Pd	PSS1/2Fd	PSS4/1Rd
		PFO2/SS3R	PSS1/3Cb	E1UBLx6	PFO/SS1Cd
		E2EM1P	L2AB3Hh	PSS1/UBFh	PSS7B
		PEM1/FO4Cd	PSS4/1Ad	PSS7/1A	PFO3/2A
		PEM1Fd	E2SS4/3P	PSS7Ax	PSS1/4B
		PEM1Eb	E2SS1/4Pd	PFO3/1Cd	E2SS1Ps
		PUBVx	L1UB1Hh	E2EM1/SS3Pd	PAB3F
		PFO1F	PSS1/FO4Bd	PSS1Ax	PFO5Fd
		PSS1/2B	E2FO3P	L2UBK	PSS4/FO4A
		PFO2Fh	PEM5Td	E2SS1/US2P	PFO1Bh
		R4SBA	PFO1/EM1R	PFO1/4Bh	PEM1/SS2F
		PSS7Bd	PFO1Sd	PFO3/1R	L1UBVx
		PFO1/4Cx	PFO4B	PEM1/SS1F	PSS4Bd
		PSS/EM1A	PSS5/1F	PFO4/1Cx	E2FO1Ps
		R4SBC	PFO1/SS4Cd	PFO1/2Bd	PSS5Fh
		PSS1/EM1Ad	R3UBHh	E1ABL	PABFb
		PFO1Fb	PSS1/FO4E	E2SS4/FO4P	PFO3/SS3B
		PFO2/4C	L2USK	PSS4/1B	PEM1/SS1E
		R4SBAx	PFO1Rd	PAB1F	PSS3/4R
		E2SS1Pd	PSS6/7S	PFO1/EM1Eb	PFO6B
		E2SS4P6	E2SS6/7P	PFO4/1Ed	PSS/EM1F
		PFO1/SS3Ad	PSS4/EM1E	PSS1/FO5F	PFO7/6B
		PFO1/4Ax	PSS1/EM1Cb	PSS4Rd	PSS1/EM1Cd
		PFO4/SS1Bd	PSS5Gh	PFO4/SS3B	PEM1/SS1Cd
		R3RSC	PFO1/4Bd	PSS/EM1Bd	PFO1/UBFb
		PFO1/SS7B	PEM1Bh	PFO1/SS4Ad	PFO1/3Cx

		PFO3/4R	PEM2F	PUSR	PAB4Gb
		PFO4Rs	E2SS3/4P	E2EM5/SS1Pd	E2SS4Ps
		PFO4/1C	PFO1/SS1Bd	PFO2/1R	PFO6/SS7B
		PFO5/UBHx	PSS1/EM1B	PEM1/FO1Fb	PFO4/SS4Ad
		PEM1Ch	PFO7/1E	PFO4/1A	PFO1/SS1Fd
		PAB4Hb	PFO4/SS4Bd	E2FO4Pd	E2SS3/1Pd
		PABHh	PFO2/SS1F	PUB/SS1Fx	PFO3Ad
		PSS3/FO1C	E2EM5P	PSS3/4Ad	PFO4Bx
		PEM1/FO4Bd	PFO4Cb	E2FO3/4Pd	PFO/EM1C
		PSS1Cs	PEM1/SS3Rd	R3RB1F	PFO6R
		PSS6/FO2B	E2FO5M	PSS1/2F	PSS1K
		PFO1/SS1C	PSS1/FO2Cd	PFO2Ch	R3UB1H
		PFO1/EM1E	PSS4Ch	PSS1/FO1Bd	PFO5F
		PFO4/SS4Rd	PEM1Ah	PFO1Bd	PFO1/3R
		PSS4/EM1Bd	PSS3/EM1C	PFO1/4Ed	L2USCb
		PFO6/7Bd	E2US/EM1Nd	L2USJh	PSS/EM1A
		R2ABH	E2EM1/SS1Pd6	PSS3/EM1B	R3UB1F
		PEM1Ab	L2EM2Fh	PEM1/SS1Bd	PFO3/4S
		PUB/SS1Fb	PSS3/FO4R	PEM1/SS5F	PFO1/SS7A
		PSS1/FO1C	PSS4K	PSS4/FO1Cd	PUB1Gx
		PEM1/SS4Bd	PUB/FO5Fh	PSS3/4B	PUB/FO5Hh
		PAB3Gb	PFO1Ed	PFO4/1Sd	PSS3/FO2B
		PFO2/3A	PFO3/4B	PFO4/3Bg	E2SS1Ph
		PFO4/1Rd	PSS1/2Cd	PSS1/EM1Rd	PSS3/4C
		PFO4/1Ad	PSS4Ah	L2UB/EM2Hh	L2ABHx
		E2SS1P6	PSS3A	PFO1/SS3Rd	E2EM1Pd5
		PFO1/SS1Rd	PFO4Ab	PSS/FO1Fh	L2EM2K
		PFO1Fd	PFO1E	PFO5/1Fb	E2USNd
		PSS4/FO4Bd	PSS1/EM1Kx	PFO1/2B	PFO4/EM1E

		PSS2/3C	PSS3/1Ad	E2FO1Pd	PEM1/SS4Cd
		PAB/UBFh	PSS1/EM5Rd	PFO6/7A	PAB1H
		E2US/EM1Pd	PSS1/EM1Bd	PEM1/FO1Bd	PFO7/6C
		PEM1/FO1T	PFO2Cd	PSS3/EM1Cd	PFO1/SS3C
		PFO2/1Cd	PSS4/FO4C	PSS3/EM1Rd	PFO1/EM1Cd
		PSS3/FO3Bd	PSS3S	E2US2N	PEM1/SS1Ed
		R3RBH	PEM2Gh	PEM1Fx	PFO4Bh
		PSS1/4Rd	M2US2P	PFO1/SS4A	PFO2/SS3B
		PEM1/USC	PEM1E	PABHx	PFO1/3Ah
		PEM1/SS4R	PSS3/1Cd	PSS3Cb	PSS1/FO1Cd
		E2SS4Pd	E2EM5Pd	PSS/EM1Cb	PFO4/SS1Sd
		PEM5/SS1Rd	PSS4A	PFO6/7C	PEM1Cb
		PFO5Fb	PSS1/FO3Bd	PFO1/SS3E	E2US2/SS1P
		PEM1Fh	E2SS7/EM1P	PEM1/FO1E	PSS/FO1Cb
		PEM1/SS1C	PFO4/SS7A	L1UBHb	PFO5T
		PEM1/FO4C	PSS1Bb	PFOC	PSS1/FO2B
		PSS3/4Bd	PSS3/1R	PUB/EM1Fh	R2ABHx
		PUBK	PSS3/FO1Bd	PUSK	L2UBGh
		R3RBFx	PFO1Ad	PFO1/EM1C	PSS3/FO4Ad
		PSS7/FO4B	PFO3Cd	E2USNh	PFO5/UBFb
		PSS4/3R	PSS4/EM1C	PSS4/1S	PSS1/3Ch
		E1UB3Lx	PSS3/1Rd	L2AB4Hh	PAB4Hx
		PEM1/FO1Rd	E2SS4/1P6	PFO/EM1E	PFO4/EM1Bd
		PFO4Sd	PSS4/FO2B	PUBHh	PABKx
		PSS1/FO7B	PSS1/EM1T	PFO2/1F	PFO4/1E
		PFO4Bd	R2USC	E2RSN	PUB3H
		PEM5Rd	L2US3Ch	PSS1/4Sd	PSS1/FO4R
		E2SS1/EM1P	PEM1/SS3R	PSS1Bd	PSS1Fx
		PSS1/2A	PSS1Bh	PSS3Bdg	PSS6/FO4B
		L2ABH	PEM1/FO5Fd	PSS1Sd	PSS1/3R

Field	Description	Expected Values			
		E2EM1P6	PUB1H	PFO1/SS1Fb	PSS1/FO4Cd
		PEM1Rh	PFO3/4A	PEM1/SS3Ch	PUB/FO2F
		PFO4Ed	E1UB2Lx	PEM5Fx	PFO3A
		PEM5Fh	PEM1/UBF	PFO3/4Cd	PFO1Fx
		PFO4R	PFO/SS1E	E2SS3Pd	PFO/EM1Ah
		PEM1/SS1Fd	PUB3Gx	PEM1Ed	PFO1/3A
		E2EM1N6	PAB3Hh	PFO4/EM1Rd	PFO1/SS1Ad
		PUBVh	L2UBFh	PFO6/4C	